9800 Local ACP Response Concerns and Preparedness for Environmental, Economic, and Cultural Resources

The essence of spill response contingency planning is the identification and protection of environmental, cultural, and economic resources at risk. Section 9800 is a catalog of environmental, cultural, and economic concerns which have been identified by the Area Committee. Strategies to protect these sites from oil and collateral impacts are included for many of these resources which may be at risk during an event. These, in combination with geographic constraints that impact spill response measures at the respective locales, define the response need.

Map indicating Environmentally Sensitive Sites

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9800.1 Organization of Section 9800

Section 9800 provides geographically organized information about ecologic, cultural/historic, economic, and other significant resources that may be at risk from spills, for the three included ACPs. The Sector map on the previous page shows the domains of each of the three included Area Committees: North Coast - ACP 1; SF Bay and Delta - ACP 2; and Central Coast - ACP 3.

Within each Committee Area the Area Contingency Plan information is grouped by Geographic Response Areas (GRAs). In some instances, the GRAs fall along political boundaries such as county lines, but emphasis is given to local hydro-geographic areas, where contaminants such as oil are likely to circulate. Section 9800 is organized first by Area Contingency Plan, then by GRA or county and then into topical subsections for each county or Geographic Response Area. The Statewide template for organization is shown below for each geographic grouping, though local variations accommodate the needs of each of
California's Area Committees (not all ACPs have all the topical subdivisions shown or in some cases have additional sections):

9810 ACP Domain
- 9811 County or Geographic Response Area Subdivision
  - 9811.1 Sensitive Sites (Note: Southern California Area Committees have subdivided this into two subsections one for Sensitive Sites and one for endangered birds)
  - 9811.2 Cultural and Other Resources at Risk
    - 9811.21 Cultural notes (if any)
    - 9811.23 Essential Fish Habitat (usually reference to 9802.2)
    - 9811.23 Other Concerns (possible examples "Waterfowl Concentration by Season" or "local eelgrass distribution")
  - 9811.3 Economic Sites
  - 9811.4 Operational Divisions
  - 9811.5 Shoreline Access
  - 9811.6 Other Local Information

Each Area Plan subsection of 9800 has a table of contents following the above format to provide quick reference to include information.

9800.2 Response Prioritization

Protection prioritization in a spill event should be determined by two considerations. The driving consideration is how soon the oil will get to each sensitive site. The second is the **predefined hierarchy of protection priorities (Section 9800.24 below.)** This second consideration becomes a factor whenever response resources are insufficient to implement all the response strategies necessary to protect the resources at risk. Responders should not assume that sensitive locales equidistant from the source of a spill are at equal risk from the oil. This means that the urgency to protect a key resource is first determined by the likelihood that it will be impacted in the near future before it can be protected by requisite response staff and equipment (can the sites at risk be protected by available resources before oil arrives?) If the sites are too numerous to protect with the response resources available within the projected times of impact, then triage of protection follows a prescribe order.

For the purpose of prioritization, "risk" is defined as "the probability of spilled oil reaching the vicinity of a sensitive site of concern." During an actual oil spill event, the relative likelihood of a site coming into contact with the oil is a function of the proximity of the spill to the site and whether prevailing conditions, the wind, current, and tides at the time of the spill, will move the oil toward or away from it. At a minimum, first responders to a spill in the marine environment, and OSPR Scientific Field Staff in particular, must be able to forecast the speed and direction of oil movement. This requires responders to use the best information available (optimally, real time information) about the local weather, tides, and currents to make the best prediction possible about the movement of the oil away from the spill release location. This information can be used to model the probable trajectory. Models can be as simple as estimates of movement drawn by hand on a chart or map or a computer simulation.

9800.21 Modeling Oil Spill Trajectories

During initial response “envelope trajectory” modeling is usually the most effective tool. As more assets and information becomes available, computer modeling provides better guidance. Computer models are very useful, but not often available in the initial critical hours and few spill responders are able to use them or have access to them. Recent reliable aerial observations if and when they become available, are helpful to correct projections whether from computer or envelope models. Regardless of projection method, predictions must be made on some modeling assumptions. Most spill responders have access to tide and current information and can use these to make trajectory estimates. The envelope trajectory method is described in Section 3211 and in greater detail in Section 4600.

9800.22 Initial List of Site Protection Priorities

Using the envelope trajectory method, the list of protection priorities may be generated even before traveling to the spill location. The normal sequence of actions is as follows. First, the responder responsible to identify sites needing protection can execute the envelope trajectory in a matter of minutes. Then the resulting trajectory can superimpose on the GRA maps in Section 9800map(s) and to determine which locales are at risk. The sites can be prioritized using the probable time of impact and the

prioritization criteria below (Section 9800.23.) The strategies most appropriate to protect the sites can be selected from the ACP pages. Sites and their selected protection strategies should be listed in a priority-time of impact sequence. The resultant list the sites and strategies to be used for protection should be then transmitted by fax or email (or even phone) to operations managers. (Supplying the prioritized list of protection strategies in a list form is essential to avoid miscommunications.) If better information becomes available later, this method can readily be used to revise the list of priorities. Responders with local knowledge may modify the priorities based on seasonal differences in plant and animal distribution other local conditions.

9800.23 Prioritization - Predefined Hierarchy of Protection in Statutes

State and Federal law establish three priority levels for dedication of emergency oil spill response resources.

First Priority - Protection of human health and safety
Second Priority - Protection of environmental resources
Third Priority - Protection of economic resources

Examples of resources that will receive a first priority response (human health and safety) include:

-power plant intakes -desalinization plants
-drinking water intakes -other health/safety intakes
-public use areas at risk (e.g. fire departments)
(e.g. hazardous fumes)

Within the Second Priority – Environmental Resources – sites are ranked by sensitivity. This sensitivity may be useful in making priority decisions between two sites if both are impacted simultaneously but inadequate resources are available for concurrent protection (See 9801 below)

9800.24 Further Considerations in Preparing Trajectory Projections

Trajectories and oil distribution maps may and should be corrected with reliable overflight information if and when it becomes available. If viewing conditions are poor, do not assume that the overflight information in better than envelope calculations; unreliable overflight information has resulted in regrettable consequences in past spills. Routine overflights provide the most insight if they are concurrent with high and low slack water since those times will show maximum extent of oil movement. Repeat envelope trajectory calculations with updated information until computer model results are available.

Real- time current measures can be helpful to improve envelope trajectories. Such real-time data are available for many locations through the Physical Oceanographic Real-Time System (PORTS®), CODAR (Cencoos or Socoos), and other online information sources.

Freshwater runoff can significantly change the time and velocity of tidal currents. Estimates of oil distribution will be improved by applying the previous day's deviation

between real-time current measurements and the predicted tidal currents to estimate the deviation for the current day's predicted tidal currents.

Computer simulations are the preferred method to make trajectory projections. Responders should use computer predictions for periodic intervals over the short term future as soon as possible in the response. Computer simulations combined with current overflight information can provide projections which include scope as well as extent of spill expansion and have greater detail for some local current patterns. The projection images are very useful for determining which resources are most likely to be reached by the oil and therefore at most "risk". Computer simulations are effective for looking at advanced time intervals. For example, predictions are useful for every six hour increment (interval keyed to the maximum and minimum tides) for the first 36 to 48 hours and including any predicted changes the wind direction and/or speed and weather. Normally, computer projections are through the National Oceanic and Atmospheric Administration's Scientific Support Coordinator. Envelope trajectories may still be used to verify the output from simulations.

Wind has less effect upon the distribution of oil in a strong current (as in bays and estuaries.) First, since oil is moving at 100% of flow, currents are dominating oil dispersion in high current environments. Second, helical flow patterns in currents will usually keep oil in the main channel until slack tide. The helical flow will stop at slack tide and the oil will be blown directly down wind. Oil blown out of the channel during the slack before the ebb (at high tide) may be carried back into the channel by the ebb tide before it can impact shorelines, however, oil blown out of the channel during the slack before the flood (at low tide) will be blown directly downwind until it strands on the shoreline. In ocean environments, winds tend to be more dominant because currents tend to be more modest; however, recent CODAR information indicates that there may be periods of high velocity ocean currents of up to two knots in places along the California coastline.

9801 Ecologically Sensitive Sites

Protection of environmental resources has the highest priority after human health and safety. Both Federal and State laws require that sites having special ecological sensitivity be identified and provisions be made to protect or otherwise mitigate for the site impacts from spills. In California these locations are termed "Sensitive Sites." For each sensitive site, information is summarized in the Site Summary, Site Strategy, and accompanying Strategy Diagram pages in Section 9800.

The purpose of this section is to provide background, definitions, and philosophy behind the site identification and protection. The selection of sites and development of specific protection strategies to meet the site specific needs was conducted using a standardized protocol to ensure consistency for California's entire coast. The process of site visits, training exercises, and discussions allows trustees and response experts to exchange concerns and feasibility limitations in forming protection strategies. Using this approach, the local area committee incorporates input of State and Federal trustees, and stakeholders (industry, spill response co-ops and contractors, non-governmental environmental groups, and other agencies) to form consensus on the appropriate site protection strategies and response resources. The committee will revise strategies based on new knowledge and to adapt to changing conditions. This information is updated and maintained by the Department of Fish and Game, OSPR, in the Site

Information and Spill Response Strategy (SISRS) database. The sensitive site ACP pages included in Section 9800 are produced from the SISRS database, and the database always has the most current information available for sensitive sites.

9801.1 Sensitivity Ranking of Ecologically Sensitive Sites

Each site has an environmental sensitivity ranking. The ranking index was developed in order to identify the relative sensitivities of these sites to oil and, in turn, to help determine protection priority of sites. These ranks define the environmental sensitivity of the area and its resources at risk. The environmental sensitivity differs by location or season depending on conditions or the presence of species. Accordingly each site is ranked A, B, or C based on the following definitions:

Category A - Extremely Sensitive - highest concern for protection:
Wetlands, estuaries and lagoons with emergent vegetation (marsh-riparian ESI 10) Sheltered tidal flat (ESI 9); and Habitats for rare, threatened or endangered species (State or Federal); Sites of significant concentrations of vulnerable and sensitive species (e.g. pinniped pupping)

Category B - Very Sensitive - very high concern for protection:
Major pinniped haulout areas during non-pupping seasons; Moderate concentrations of vulnerable and sensitive species; other low energy habitats (ESI types 8A, 8B, 7 and 6B)

Category C - Sensitive – great concern for protection:
Higher energy habitats (ESI 6A through 1) for example: *Habitats important to large numbers of species of sport, commercial value, and scientific interest or species experiencing significant population declines though not yet threatened.*

The A, B, or C ranking should not be misconstrued as defining whether a site can be effectively protected from oiling nor which site should receive priority in operational shoreline protection. Some “A” sites or portions of “A” sites may not be feasible to protect using conventional techniques. For example some seabird colonies and pinniped haulouts may be in such high energy environments that booming is precluded, and the primary protective measures is effective offshore skimming and advanced technology such as dispersants and burning; in fact, collateral impacts from aircraft and other response activity may rank equally in concern. Assigning a response priority is usually guided according to the time by which the oil slick is likely to impact a sensitive site regardless of sensitivity ranking. The OSPR Resources At Risk Technical Specialist will be invaluable in helping the response prioritize deployments.

9801.2 Ecologically Sensitive Site ACP Pages

Each site is described on three pages: Site Summary, Site Strategy, and Strategy Diagram. The Site Summary Sheet provides a thumbnail sketch of the layout of the site including geography, size, ownership, resources at risk of oiling at the site, and special concerns including cultural/historic sensitivities. Also included is a list of key contacts having special knowledge or stewardship.

The Site Strategy page provides specific information on response strategies to be implemented to protect the site from marine oil spills. Most sites have more than one protection strategy. These additional strategies may be used as back-ups to the primary protection strategy or as alternatives to accommodate prevailing conditions. It should be understood that the described strategies are intended as initial protection strategies for the first 24 hours of a spill. Additional or modified protection measures should also be considered. As responders and planners adjust strategies to meet the needs presented by prevailing conditions, they should, as much as possible, do so with the prior advisement of the on-scene OSPR Resources at Risk Technical Specialist and with the approval of the IC. In other words, strategies presented here are flexible and may require modification in real response situations. The Strategy Diagram page depicts the site protection strategies, topography and roads.

In addition to the information here about local sensitivities, more information assets can be accessed through respective government agencies including:

- Site Information and Spill Response Strategy database – Ca Dept. Fish & Game, OSPR Ecological Sensitivity Atlases for the California Coast – CA Dept. of Fish and Game or NOAA
- Rare Find Database - CA Dept of Fish and Game - endangered species both Federal and State listed species
- Wildlife Habitats Relational Database – CA Dept of Fish and Game – species associated with habitat types
- Environmental Sensitivity Atlas

9802 Cultural and Other Resources at Risk

This sub-section includes GRA specific information about resources at risk which are not geographically localized, identified, or variable distributed from year to year. For example, though cultural resource sensitivity is noted on Sensitive Site Summary pages, most cultural resource information is very confidential and not published, but local key contacts may be included here. Another example may be bird wintering concentrations. One of the required elements is “Essential Fish Habitat;” any specific local information may be available here.

9802.1 Cultural and Historic Resources

Cultural or historic resources details are noted on the site summary pages when sensitive sites overlap cultural sites. However, most cultural resource information is very confidential and is only available from other sources. The Cultural and Historic Resources Information System (CHRIS) is an elaborate database maintained by the Office of Historic Preservation of the California Department of Parks and Recreation. Access to the database is restricted and similar information is not publicly available here in order to keep these resources as secure as possible.

Cultural and Historic Resource impact mitigation is addressed in RCP Appendix **XX**. The key guidance is the **CALIFORNIA IMPLEMENTATION GUIDELINES FOR FEDERAL ON-SCENE COORDINATORS FOR THE PROGRAMMATIC AGREEMENT ON PROTECTION OF HISTORIC PROPERTIES DURING EMERGENCY RESPONSE UNDER THE NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN.** It provides the process for FOSCs to protect and conserve cultural and historic resources during a response through the FOSC’s Historic Properties Specialist.

Details included in ACP GRAs are for local contacts and similar local information.

Sources of Cultural and Historic Resources Information

- Cultural and Historic Resources Information System (CHRIS) accessed through Office of Historic Preservation of the California Department of Parks and Recreation local Information Center Managers (individuals who maintain database hubs)
- certified archeological contractors
- Tribal Historic Preservation Officers **(THPOs)** – local tribal information
- **Native American Heritage Commission (NAHC)** - Tribal contact list: Dr. Meyers - 916-653-6251; Dr Gaublaz 916-653-4082, 657-5390

9802.2 Essential Fish Habitat

“Essential Fish Habitat” is a required element ACPs. “Essential Fish Habitat” is legally and distinctively different than “Critical” habitat and includes areas important to sustaining commercial species as well as threatened and endangered species habitats "essential" for the conservation. This definition is sufficiently broad as to include virtually

all marine and estuarine waters and any fresh waters including migratory species. This concept is fully treated in the RCP. GRA specific detail may be provided as here.

Essential Fish Habitat

Ocean fisheries are managed under the Fishery Conservation and Management Act of 1976, now known as the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The Act provided the National Marine Fisheries Service (NMFS) legislative authority for fisheries regulation in the United States, in the area between three-miles to 200 miles offshore.

In 1996, the Magnuson-Stevens Act was re-authorized and amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267) to emphasize the sustainability of the nation's fisheries and establish a new standard by requiring that fisheries be managed at maximum sustainable levels and that new approaches be taken in habitat conservation. This habitat is called “Essential Fish Habitat” (EFH). The Act established procedures designed to identify, conserve, and enhance EFH for those species regulated under a Federal fisheries management plan.

The purpose of addressing habitat in this act is to provide for one of the nation’s overall marine resource management goals – maintaining sustainable fisheries. As evidenced for all wildlife resources, suitable habitat is essential for their subsistence. Although the concept of EFH is similar to that of “Critical habitat” under Endangered Species Act (ESA), measures recommended to protect EFH by NMFS or a Council are advisory, not proscriptive. An effective EFH consultation process is crucial to ensuring that Federal actions serve the Magnuson- Stevens Act resource management goals. For those species currently listed under ESA, but not necessarily under EFH, individuals and habitats must be protected and consultation with NMFS and/or United States Fish & Wildlife Service (USFWS) should be implemented.

The MSA requires Federal agencies to consult with NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH (MSA §305(b)(2)). See ACP Section 4800 for consultation procedures.

EFH means “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” (MSA §3). For the purpose of interpreting this definition of EFH: **Waters** include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; **substrate** includes sediment, hard bottom, structures underlying the waters, and associated biological communities; **necessary** means the habitat required to support a sustainable fishery and the managed species’ contribution to a healthy ecosystem; and “spawning, breeding, feeding, or growth to maturity” covers a species' full **life cycle** (50 CFR 600.10). **Adverse effect** means any impact which reduces quality and/or quantity of EFH, and may include direct (*e.g.*, contamination or physical disruption), indirect (*e.g.*, loss of prey or reduction in species fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions (50 CFR 600.810).

The EFH mandate applies to all species managed under a federal Fishery Management Plan (FMP). For the Pacific West Coast (excluding Alaska), there are FMPs, covering

groundfish, coastal pelagic species, and Pacific salmonids. Therefore, Federal agencies must consider the impact of a proposed action on EFH for any species managed under those FMPs. A brief description of EFH identified in each FMP follows. Detailed descriptions are contained in the references following the EFH Assessment template.

Groundfish: EFH for Pacific coast groundfish is defined as the aquatic habitat necessary to allow for groundfish production to support long-term sustainable fisheries for groundfish and for groundfish contributions to a healthy ecosystem. Descriptions of groundfish EFH for each of the 83 species and their life stages result in more than 400 EFH identifications. When these EFHs are taken together, **the groundfish EFH includes all waters from the mean higher high water line, and the upriver extent of saltwater intrusion in river mouths, along the coasts of Washington, Oregon and California seaward to the boundary of the U.S. exclusive economic zone (EEZ).**

Coastal pelagic species: Amendment 8 to The Coastal Pelagic Species Fishery Management Plan describes the habitat requirements of five pelagic species: Northern anchovy, Pacific sardine, Pacific (chub) mackerel, jack mackerel and market squid. These four finfish and market squid are treated as a single species complex because of similarities in their life histories and habitat requirements. EFH for coastal pelagic species is defined as: **The east-west geographic boundary of EFH for CPS is defined to be all marine and estuarine waters from the shoreline along the coasts of California, Oregon and Washington offshore to the limits of the EEZ and above the thermocline where sea surface temperatures range between 10o – 26o C. The southern boundary is the U.S.-Mexico maritime boundary. The northern boundary is more dynamic, and is defined as the position of the 10o C isotherm, which varies seasonally and annually.**

Pacific salmonids - chinook, coho, steelhead and Puget Sound pink salmon: EFH for the Pacific coast salmon fishery means those waters and substrate necessary for salmonid production needed to support a long-term sustainable salmonid fishery and salmonid contributions to a healthy ecosystem. To achieve that level of production, EFH includes all those streams, lakes, ponds, wetlands, and other currently viable water bodies and most of the habitat historically accessible to salmon in Washington, Oregon, Idaho, and California. Southern steelhead may have occupied as much as 15% of the winter steelhead range in California, but the present distribution in southern California has been reduced to perhaps 1% of the stream miles they formerly inhabited (E. Gerstung, in: CDFG, 1995). **The Evolutionary Significant Unit includes all naturally spawned populations of Southern California steelhead (and their progeny) in streams from the Santa Maria River to Malibu Creek**. **- In the estuarine and marine areas, salmon EFH extends from the near shore and tidal submerged environments within state territorial waters out to the full extent of the exclusive economic zone (370.4 km) offshore of Washington, Oregon, and California north of Point Conception. - Freshwater EFH for Pacific salmon includes all those streams, lakes, ponds, wetlands, and other water bodies currently, or historically accessible to salmon in Washington, Oregon, Idaho, and California, except areas upstream of certain impassable man-made barriers (as identified by the PFMC), and longstanding, naturally-impassable barriers (i.e., natural waterfalls in existence for several hundred years).**

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Calif. Dept. of Fish and Game (CDFG). 1995. *Fish species of special concern in California.* By Moyle, Yoshiyama, and Williams. Sacramento. 272 p.

PFMC (Pacific Fishery Management Council). 1999. Amendment 14 to the Pacific Coast Salmon Plan. Appendix A: Description and Identification of Essential Fish Habitat, Adverse Impacts and Recommended Conservation Measures for Salmon (August 1999).

PFM (Pacific Fishery Management Council). 1998. Final Environmental Assessment/Regulatory Review for Amendment 11 to the Pacific Coast Groundfish Fishery Management Plan (October 1998).

PFMC (Pacific Fishery Management Council). 1998. The Coastal Pelagic Species Fishery Management Plan: Amendment 8 (December 1998).

9802.3 Other Resources at Risk

This section is available to address any other resources of concern which have not been addressed in previous sections.

The California Wildlife Response Plan (Appendix XXIIa of RCP) includes methods of assessing transient resources such as migratory birds during a spill response.

9803 Economically Sensitive Sites

Strictly economic resources are designated as the third priority for dedication of oil spill response resources, following human health and safety and environmental resources. The economic sites are ranked using a continuation of the environmental scale with D, E, and F categories. People involved with response planning recognize that throughout California's marine waters, along the State's shoreline, and within coastal communities are many resources of economic importance that could be severely impacted by an oil spill incident. Limitations of time, personnel, and the availability of information caused that not all resources of significant economic value and susceptible to marine oil spills could be identified at this time.

9803.1 Criteria-for Priority Response and Types of Economic Resources

Economic resources that have a greater potential for long-term damages receive a higher rank or priority for emergency response. The following criteria or definitions are used to categorize economic resources in terms of priority for response:

D = Economic activities and resources which require high water quality for their operations or existence. Resources that fall into this category would face severe, long-term economic impacts from a spill. This category includes commercial fishing areas (also have environmental rank), aqua culture and mariculture areas, marine labs, salt pond intakes, aquarium water intakes, etc.'

E = Facilities, businesses, or resources which directly use coastal or bay waters within their economic activity and which are at risk of oiling from a spill in marine waters. The resources falling into this category would face significant disruption of their activity, but shorter term potential damages from oiling than resources in the "D" category. This category would include resources such as marinas, harbors, commercial piers, industrial intakes, and parks or recreational areas.

F = This category contains marine associated facilities, businesses and resources. These resources would face economic impacts from a marine spill, but do not depend directly on marine water for their economic base. Resources in this category will tend to face less severe damages than those identified in categories D or E. This category includes economic resources such as waterfront hotels, restaurants, shops, and residential areas. (Note: residential sites would be evacuated to avoid health risks).

9803.2 Types of Economically Significant Resources and Ranking

Listed below are various types of significant economic resources potentially at risk from oiling- and the appropriate response priority category.

- aqua culture, mariculture (D)
- aquariums, marine labs (D)
- facility intakes [not affecting public health] (D)

- parks, beaches, recreational areas (E)
- vessel or boat traffic areas: shipping, lanes, harbor entrances, river mouths, bays, anchorages (E,)
- marinas, houseboat areas (E)
- ferries and tour boats (E)
- port or harbor facilities (E)
- boat moorings, cargo piers, terminals, fishing piers (E)
- ship or boat repair shops (E)
- tourist hotel, restaurant areas (F)
- waterfront residential areas (F)

9803.3 Information About Sensitive Economic Resources

Economic sections within GRAs contains lists, and/or maps of sensitive economic areas or resources. Below is a description of the types of information that may be provided for each identified economic resource or facility. Some information is unavailable for specific resources identified within this section.

1. Resource or facility identification number
2. Geographic location of resource or facility
3. Brief description of the resource at risk
4. Contact names and numbers (24 hour access if available)
5. Priority response ranking

9804 Shoreline Operational Divisions

Shoreline Operational Divisions are presented in the ACP as front-loaded information to assist in rapid response planning to provide for quickly organized operational objectives and assignments along affected shorelines. The operational divisions have been developed in conjunction with the US Coast Guard, California Fish and Game OSPR, and various Oil Spill Response Organizations. Experience has demonstrated that in the earliest stages of spill response having organizational issues such as this prepared in advance is very useful to the response team.

The shoreline operational divisions are organized and named according to County boundaries. Within county domains, divisions are boundaries are guided by logical geo-political features such as coastal physical characteristics and land ownership/management issues, shoreline cleanup logistical considerations, and manageable sized coastline segments (generally not longer than about ten miles although some variation occurs.) Logistics, access, and manageability were driving considerations in this effort, particularly as it relates to types of cleanup operations required and problems likely to be present.

In ACP areas having more than one county, Shoreline Operational Divisions will utilize county codes followed by a single alpha character (A to Z). Shoreline operational divisions are labeled from north to south in each county. For example, the north-most operational division in Los Angles County is “LA-A.” In large bays (i.e. San Diego), the labeling will progress in a clockwise direction to accommodate changing coastline angles. Divisions can be easily subdivided (as necessary) by the Operations Section management to provide for appropriate work assignment effort.

Coastal Operational Divisions are presented in the ACP as front-loaded information to assist in rapid response planning to provide for quickly organized operational objectives and assignments along affected shorelines. The operational divisions have been developed in conjunction with the US Coast Guard, California Fish and Game OSPR, and various Oil Spill Response Organizations. Experience has demonstrated that in the earliest stages of spill response having organizational issues such as this prepared in advance is very useful to the response team.

The coastal operational divisions are organized and named according to County boundaries. Within county domains, divisions are boundaries are guided by logical geo-political features such as coastal physical characteristics and land ownership/management issues, shoreline cleanup logistical considerations, and manageable sized coastline segments (generally not longer than about ten miles although some variation occurs.) Divisions can be easily subdivided (as necessary) by the Operations Section management to provide for appropriate work assignment effort. In ACP areas having more than one county, Operational Divisions will utilize county codes followed by a single alpha character (A to Z). Coastal operational divisions are labeled from north to south in each county. For example, the north-most operational division in Los Angles County is “LA-A.” In large bays (i.e. San Diego), the labeling will progress in a clockwise direction to accommodate changing coastline angles.

Double digit alpha characters (AA to ZZ) will be used for all offshore operational areas and any other special operational areas needed during response.

9805 Shoreline Access

Some Area Committees have provided detailed shoreline access to aid Planning and Operations Section managers in the rapid deployment of field response personnel and equipment on coastal beaches during the emergency phase of spill response. If this information is available for a particular Area Committee area of responsibility, it will be found in this section of the respective Geographic Response Area.

9806 California Strategy Concepts, Systems Approach, and Nomenclature

Every geographic area has its own approach and a certain amount of variability in language. This section will aid responders unfamiliar with California response understand local methods, concepts, and vernacular.

9806.1 Booming Systems

Boom and booming systems are described here to enable planners and operations staff to better achieve their objectives. First, boom terminology used on the west coast is different than much of the rest of the U.S. and the World Oil Spill Catalog. In general, harbor boom (see definition below) is used as primary site protection in the San Francisco Bay/Delta Area, although some strategies call for swamp boom (river boom - see below). For response and planning purposes, harbor boom may be substituted for swamp boom and two consecutive layers of swamp boom are roughly equivalent to one layer of harbor boom. Swamp boom may be used in low energy applications: areas with little chop or waves and light currents.

However, responders should be aware of several issues and amend actions as necessary. Long-skirted booms in shallow channels can aggravate entrainment problems. In such instances, it may be inadvisable to substitute harbor boom for swamp boom.

Also, wherever oil accumulates against booms in rough or choppy conditions, there can often be the problem of oil washing over the flotation. This nullifies the booming. To avoid this problem, protective strategies are designed to avoid collection of oil in pockets (except for the purposes of skimming), and instead, are oriented to keep oil moving along booms to collection or deflection as much as the situation permits. Responders, both in operations and planning will need to adjust boom configurations to prevent excessive “pocketing” so as to minimize entrainment and over-wash. This may mean altering boom angles. This may also be unavoidable and require back-up layering of boom. Some strategies include this as a contingent alternative, but regardless, if over-wash is a problem, then a second layer should be viewed as the containment and deployed in the “shadow” of the becalming first layer. In some instances the lesser freeboard of swamp boom may provide adequate control once the wave has been broken.

Regardless of strategy design, deployment and adjustment remain key to successful booming. If strategies are not properly deployed, whether prescribed or amended, and maintained though proper anchoring and tending, the protective booming will be

neutralized. Every effort by managers and responders should be made to ensure proper execution.

9806.2 Skimming Systems

This paragraph provides an introduction to skimming issues in site strategies. In the following strategies, the inclusion of self-powered skimming vessels is minimized in recognition that the first response resource priority is on-water skimming: the best protection for sensitive sites is to minimize oil impacting sites by best available means (ON WATER RECOVERY). However, shore-side skimming and defection offshore to skimming are integral parts of protecting the sensitive site or nearby sites at risk. The philosophy of strategy development includes the intent to leverage opportunities to control, capture, immobilize or collect oil at shorelines where possible. Once oil has been immobilized, either contained or confined near shore, oil skimming efficacy dramatically improves. Also, once oil has impacted a site, it may be a reasonable tactic to keep it at that locale rather than let it re-mobilize to impact yet another site.

Since there are a variety of skimming units that may be included in the strategy, this preamble provides an opportunity to define skimming systems so that the elaborate descriptive verbiage need not be repeated in each strategy. A number of acronyms for skimming systems are included in the Acronyms and Nomenclature section below: TSA, SFS, SPS, and SSS.

A skimming system includes four elements: a skimming device, storage for skimmed oil, a pumping devise to move captured oil from skimming device to storage, and a power supply capable of enabling all devices.

9807 Glossary of Acronyms and Nomenclature Used in Strategies

To minimize repetitious verbiage in protection strategies, the following acronyms and nomenclature may be used in strategies and in Strategy Pages (and SISRS database).

Anchoring Systems – Whether expressly stated or not, anchoring systems must be sufficient to hold boom in the aggressive currents where boom may be deployed. To insure successful anchoring, the anchoring system should includes: anchors with anchor buoys to control placement, anchor chains which equal or exceed the weight of anchors indicated, enough line to produce adequate scope to hold anchors (rule of thumb is 3:1 (line to depth), but 5-7:1 for high current areas), and a buoy between anchor line and boom (crown buoys) to keep the anchor from sinking the boom under tension conditions.

BBE - boom boat equivalent – the capability of a vessel to transport and deploy 600 feet of Hboom or 1800 ft of swamp boom.

Boom boats - a boat suitable for transporting, towing and deploying large amounts of boom, usually crewed with a helmsman and two crew for deployment, usually referenced in terms of BBE. Boom boats must be capable of grounding without sustaining damage. (Also see Shallow Water Boom boats and Very Shallow Water Boom Boats.)

Bboats - see boom boat

Danforth - refers to “danforth anchors” with chain, typically presented as a number of anchors and minimal weight (e.g., 3/12+ - means three anchors of a minimum of 12 lbs each) with at least an equal weight of anchor chain weight whether specified or not.

Without substantial anchor chain weight, anchors will not hold. Northill anchors are equivalent.

Hboom - see harbor boom

Harbor boom - an inland waters type boom (greater than 18" and less than 42" overall (flotation and skirt)) of a curtain boom design (skirted boom with solid flotation). Some strategies clarify boom size by indicating flotation and skirt as follows: 9X9+ which indicated a boom with at least 9" of flotation and 9" of skirt.

sorbm - sorbent boom, with or without a skirt

Shallow water boom boats - a boom boat capable of working in three feet of water or less, and should be able to withstand stranding without sustaining damage.

Skiff - a small two person craft able to operate in 3 foot waves or larger and capable of delivering personnel and equipment to shores.

Skf - see skiff

SFS - stationary floating skimmer - a floating platform supporting a skimmer and storage – which could be a VOSS.

SPS - self-propelled skimmer - a small to medium sized skimmer with its own propulsion and storage – which could be a VOSS.

SSS - shore side skimmer, includes a skimming unit, such as a rope-mop or weir skimmer and its support pack and a storage container such as a vacuum truck, baker tank, or other tank.

swpbm - see swamp boom

Swamp boom - a river boom type (less than 18" overall) of a curtain boom design

Towed skimming array - a skimming system with two boats towing collection booms which funnel oil to a skimming system

TSA - towed skimming array - an array with two boats towing collection booms which funnel oil to a skimming system

VOSS – Vessel of Opportunity Skimming System – a skimming system (skimming device, pump, power supply, and storage) place on a vessel which was not designed for skimming per se.

VSA – "V"-Skimming Array -Same as TSA

"V"-Skimming Array -Same as TSA

Very shallow water boom boats - a boom boat capable of working in two feet of water or less, and should be able to withstand stranding without sustaining damage.

xboom – is any boom other than harbor boom, swamp, or sorbent boom. This term is used to simplify equipment tables. A type designator should be used as well as a length. Type designators include:

TB or **TBB** – tidal barrier boom
OB – ocean boom
FB – fence boom
OS – oil snare
BB – bushy boom

9810.1 Environmentally Sensitive Resources

9810.11 Endangered and Threatened Species

While San Diego County has many species of birds, four bird species occur along the Coast of San Diego County that may require special attention during coastal spill responses. These species are Western snowy plovers (federal threatened listing), California least terns (state and federal endangered listing), the Light-footed clapper rail (state and federal endangered listing) and Least Bell's vireo (state and federal endangered listing). When it is feasible, sensitive sites that have these listed species should be monitored to avoid or minimize potential impacts from spill response activities.

The response protection strategy number 6-000 provides specific information for responders to minimize impacts to the Snowy plover and the California least terns from oil and spill related operations.

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9810.12 Critical Fish Habitat

Critical habitat is a legal definition for areas “essential” for the conservation of threatened or endangered species. Currently, no critical fish habitat has been designated in San Diego County coastal waters. However, the federally listed Tidewater goby can be found at several Environmentally Sensitive Sites in San Diego County. These sites are usually lagoons which are separated from the ocean’s tidal influence by natural sand berms. All life stages of Tidewater gobies are typically found at the inner portions of the lagoons where prevailing salinity levels are less than 10 parts per thousand. Please refer to the information provided on the Site Summary pages in section 9810.13 for specific concerns.

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9810.13 Environmentally Sensitive Sites of San Diego ACP

This section provides detailed information on Environmentally Sensitive Sites in San Diego County. Each site is described on three pages: Site Summary, Site Strategy, and Strategy Diagram. The first page provides a brief description of the site including location, access, specific concerns, agency contacts, etc. The Site Strategy page provides specific information on response strategies to be implemented to protect the site from marine oil spills. The Strategy Diagram page depicts the site protection strategies, topography and roads.

Most sites have more than one protection strategy. These additional strategies may be used as back-ups to the primary protection strategy or as alternatives to accommodate prevailing conditions. It should be understood that the described strategies are intended as initial protection strategies for the first 24 hours of a spill. Additional or modified protection measures should also be considered.

Map indicating Environmentally Sensitive Sites

9810.13 San Diego ACP Environmentally Sensitive Sites

Table of Contents

SITE SUMMARY SHEET **Revised:** 6-2005
SITE: 06-000
COUNTY: San Diego **LONG:** W variable
USGS QUAD: variable **LAT:** N variable

SITE DESCRIPTION: Snowy plover and Least tern nesting sites are seasonally occupied at various coastal beach sites. The birds may have active nests, or chicks may be actively moving about the described area. Care should be given to minimize disturbance and avoid injury to either nests, or chicks.

ACCESS: Refer to coastal access mapping information to describe the best access site. Site specific information will be developed during a response effort.

SEASONAL CONCERNS: Nesting: Snowy plovers and Least terns generally nest on coastal sandy beaches between early May and mid- September. Between October and April nesting is not a concern.
Over-wintering: During the non-nesting months of October to April adult Snowy plovers may continue to utilize beach habitats. Adult Least terns migrate south.

RESOURCES OF PRIMARY CONCERN: Snowy plovers (federal Threatened listing) are small, white and tan colored shore birds. **Least terns** (state and federal Endangered listing) are small, gull-like, gray, white and black colored diving birds. Snowy plovers tend to nest in the rack line of the high-high tide, while Least terns generally tend to nest in dune areas slightly farther from the shoreline. Nests are usually constructed on loose sand, and are easily stepped on due to their very cryptic nature. Chicks are known to run between nests and the waterline thereby potentially becoming oiled by floating, or stranded product. Chicks and eggs are vulnerable to oil transfer from adults.

Snowy plover adults forage while wadding along the shoreline. Least tern adults dive into the water to forage in shallow, nearshore areas of the open coast, embayments, estuaries, and dune lakes.

PRIORITY: A – Year-round (Nests in April to September. Over-winter adults from October to March)

ARCHAEOLOGICAL PRIORITY: Archaeological issues may be associated with the identified location. South Coastal Information Center (619 594-5682), or State Historical Information Preservation Office should be notified within 48 hours if no other overriding issues are identified to warrant earlier notification.

TRUSTEE AGENCY/LOCAL EXPERTS:

Camp Pendleton Environmental Security Office:
- Spill Response Coordinator (760) 725-9743/9768
- Camp Pendleton Duty Officer (24 hrs.) (760) 725-5617/5619
- Camp Pendleton Duty Game Warden (760) 725-3360
- Wildlife Biologist (760) 725-9737
- Camp Pendleton Cultural Resources Management Branch (760) 725-9738

US Fish and Wildlife Service (Carlsbad office) (760) 431-9440
US Fish and Wildlife Service (24h) (760) 271-6934
California State Parks and Recreation, District Supervisor (949) 492-0802
California State Parks and Recreation, Resource Ecologist (949) 497-1421
California State Parks and Recreation, 24 hr. (909) 443-2969

REMARKS:

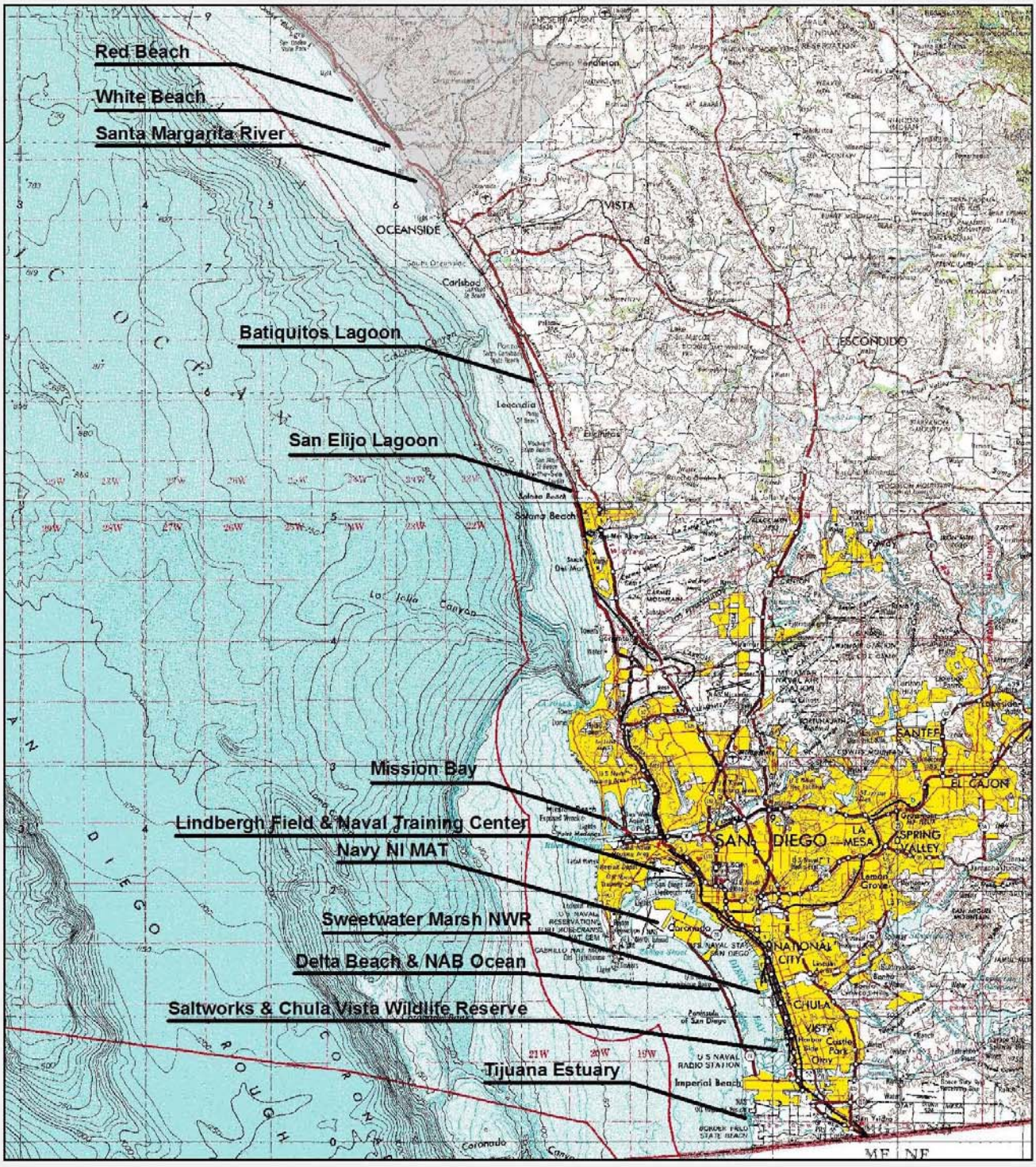

Orange County
Riverside County
San Diego County
PACIFIC OCEAN
MEXICO
Western Snowy Plover
San Diego County Map
Western Snowy Plover Regular Breeding and Wintering Areas
Western Snowy Plover Regular Wintering Areas
N
Miles
0 2 4 8

U.S. Fish & Wildlife Service

Carlsbad Fish and Wildlife Office

6010 Hidden Valley Road, Carlsbad, California 92011

California Least Tern Nesting Areas



PRODUCED BY GIS SERVICES
CARLSBAD FIELD OFFICE
GIS CONTACT: RANDY NAGEL
BIOLOGY CONTACT: JUDY GIBSON

MAP DATE: 8/21/08
IMAGE SOURCE: USGS 250K DRG
S:\stem\Randy\contaminants\clt_sdco_sites.mxd

0 5 10 Miles
0 7.5 15 Kilometers

6-110 -A Site Summary- San Mateo Creek

6-110 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		33 23'6"	117 35'36"
USGS Quad:	San Clemente	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approx. 300 FT. across. San Mateo Creek is a seasonally active water channel and strongly influenced by seasonal rainfall pattern. During wet winter periods the creek mouth may be open to intertidal exchange. However, most months the creek mouth is closed by a natural sand berm forming a relatively small pond. The creek is a heavily vegetated riparian habitat with substantial emergent marsh plants such as cattail and bulrush. Numerous species of birds, amphibians, invertebrates, and terrestrial mammals occur here.

SEASONAL and SPECIAL RESOURCE CONCERN

During winter months with good rainfall, the creek mouth may be open. During summer months two listed species of birds, the California least tern and Western snowy plover may be active in the area.

RESOURCES OF PRIMARY CONCERN

Two listed species of fish occur in this creek; the Tidewater goby and Steelhead trout, consequently any NON-EMERGENCY activity in this creek must be with the concurrence of the Camp Pendleton wildlife biologist and US Fish and Wildlife Service. California brown pelican are commonly present, and during summer months of May to September California least tern and Western snowy plover may be present along the beach face. One listed plant, Red sand verbena, may be present on the upper beach sand dunes.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 1 Notify South Coastal Information Center immediately.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		San Onofre S.O.N.G.S. Main Gate	(949) 368-6158
T		Coastal and Marine Institute	(619) 594-7723
		USFWS	(619) 431-9440
O		Bayfront Conservancy	(619) 422-8100
B		USN EOD Quarterdeck	(619) 437-2906
O		USN Oridance Disposal	(619) 437-2173
O		USN Natural Resource Specialist	(619) 532-3745
O		Camp Pendleton Environmental Security Office	(760) 725-9743
T	District Supervisor	District Supervisor	(949) 492-0802
	District Supervisor	CA Dept of Parks and Recreation	(949) 492-0802
	Resource Ecologist	CA Dept of Parks and Recreation	(949) 497-1421
		CA State Parks and Recreation (24 hour)	(909) 443-2969
E		Ca Dept. of Parks and Recreation	(619) 688-3260

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 33 23'6" Longitude W: 117 35'36"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

Use Trestles Lifeguard Station road for access to San Mateo Creek Beach Path. Heavy equipment should use this route, but will have to cross over the rail road tracks at the trestle. Clearance will be necessary in advance to avoid potential conflicts with rail traffic. A second access can be achieved from San Onofre Lagoon (07-002) access about 1/2 mile down coast.

SITE STRATEGIES

San Mateo Creek is a seasonally flowing creek that is strongly subject to rainfall events which will determine if the creek mouth will be open or closed. Most of the year it is closed by a natural sand berm. Only if the creek has recently been opened by flowing water will closure be necessary, but overtopping wave wash may need to addressed.

Strategy 6-110.1 Objective:

Close the creek mouth by sand berm.

Strategy 6-110.2 Objective:

Deploy absorbent boom across the pond.

Strategy 6-110.3 Objective:

Construct excelsior fencing across the natural sand berm to prevent wash-over of petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	and kinds	staff deploy	Staff tend
6-110.1					0		0				1	bulldozer delivered to the site	1	
6-110.2				500	0		0	1					3	
6-110.3	0	0			0		0	0			200	feet of fencing and sorbent material	6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Exit I-5 at Basilone Road and travel a short distance along the old PCH road to a gated access road maintained by State Parks. Enter the gate and proceed toward the Lifeguard offices on the bluff top, then turn south along the dirt road which leads to the beach. On the beach turn north and proceed to the San Mateo Creek mouth about one-half mile north. Approx. 300 FT. across.

LAND ACCESS: All, but contact for rail road crossing

WATER LOGISTICS:

Limitations: depth, obstruction

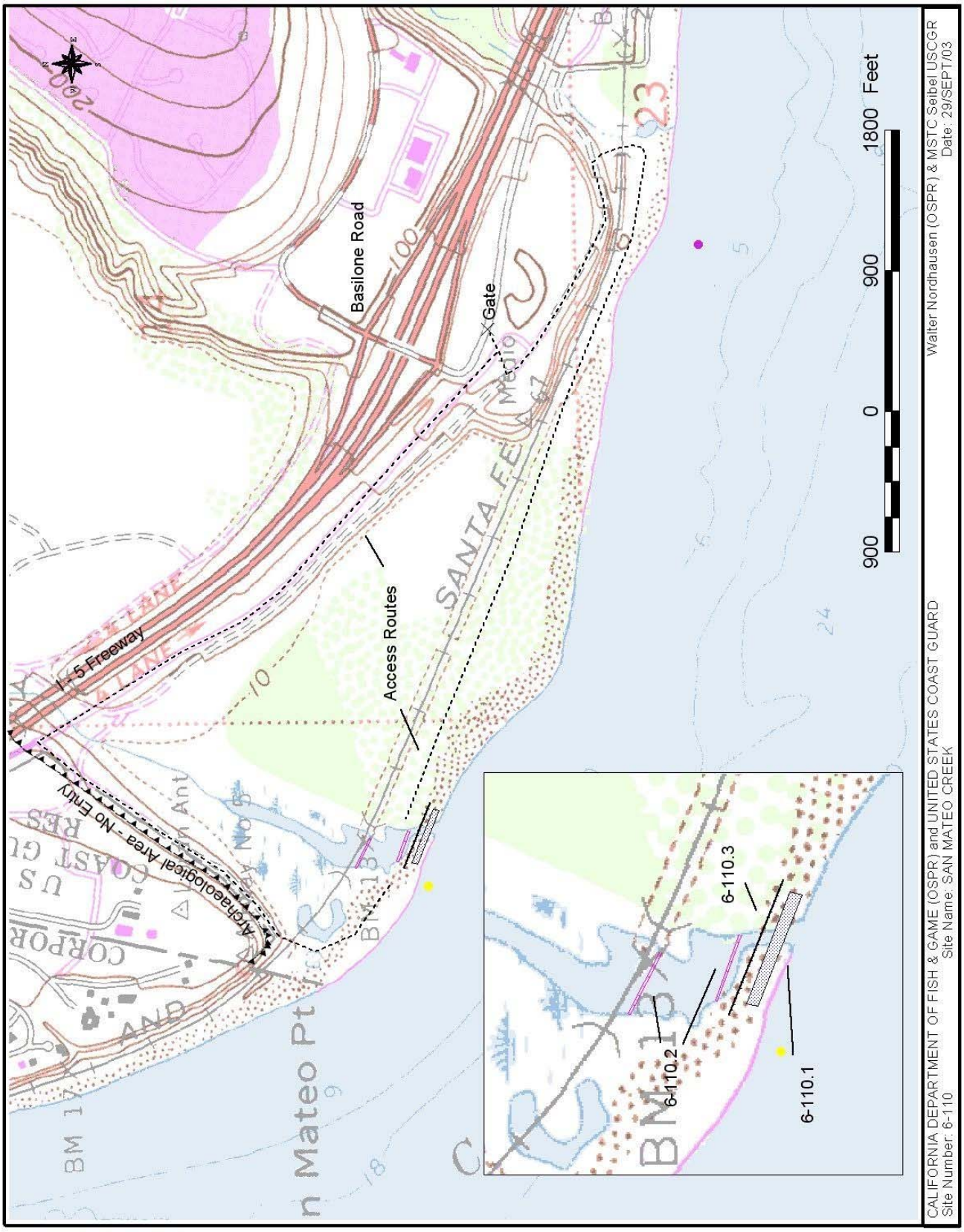
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging area is available at the end of the paved trail near the train trestle.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Thomas Guide Location	Latitude N	Longitude W
	33 22'48"	117 34'48"

County: San Diego
USGS Quad: San Clemente
NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:
San Onofre Creek is a seasonally active water channel and strongly influenced by seasonal rainfall pattern. During wet winter periods the creek mouth may be open to intertidal exchange. However, most months the creek mouth is closed by a natural sand berm forming a relatively small pond. The creek is a heavily vegetated riparian habitat with substantial emergent marsh plants such as cattail and bulrush. Numerous species of birds, amphibians, invertebrates, and terrestrial mammals occur here.

SEASONAL and SPECIAL RESOURCE CONCERN

During winter months with good rainfall, the creek mouth may be open. During summer months two listed species of birds may be active in the area.

RESOURCES OF PRIMARY CONCERN

Tidewater goby (a small fish) occurs in this creek, consequently any activity in this creek must be with the concurrence of the Camp Pendleton wildlife biologist and US Fish and Wildlife Service. California brown pelican are commonly present, and during summer months of May to September California least tern and Western snowy plover may be present along the beach face. One listed plant, Red sand verbena, may be present on the upper beach sand dunes.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 1 – Notify South Coastal Information Center immediately.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		San Onofre S.O.N.G.S. Main Gate	(949) 368-6158
E		Camp Pendleton MC Wildlife Biologist	(760) 725-9729
O		Camp Pendleton MC Spill Response Coordinator	(760) 725-9768
O		Camp Pendleton Environmental Security Office	(760) 725-9743
O	Archeologist	Camp Pendleton MC Archeologist	(760) 725-9738
O		US Fish and Wildlife Service (24 hour)	(760) 271-6934
O		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
C	District Supervisor	CA Dept of Parks and Recreation	(949) 492-0802
E	Resource Ecologist	CA Dept of Parks and Recreation	(949) 497-1421
O		South Coastal Information Center	(619) 594-5682
E/L		CA State Parks and Recreation (24 hour)	(909) 443-2969

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 33 22'48 Longitude W: 117 34'48"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

San Onofre Creek is a seasonally flowing creek that is strongly subject to rainfall events which will determine if the creek mouth will be open or closed. Most of the year it is closed by a natural sand berm. Only if the creek has recently been opened by flowing water will closure be necessary, but overtopping wave wash may need to be addressed.

Strategy 6-115.1 Objective:

Close the creek mouth by sand berm.

Strategy 6-115.2 Objective:

Deploy absorbent boom across the pond.

Strategy 6-115.3 Objective:

Construct excelsior fencing across the natural sand berm to prevent wash-over of petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-115.1					0		0	0			1	bulldozer delivered to the site	1	
6-115.2				500	0		0	1					3	
6-115.3	0	0			0		0	0			200	fencing and sorbent material	6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Exit I-5 at Basilone Road and travel a short distance along the old PCH road to a gated access road maintained by State Parks. Enter the gate and proceed toward the Lifeguard offices on the bluff top, then turn south along the dirt road which leads to the beach and San Onofre Creek mouth.

LAND ACCESS: all access available.

WATER LOGISTICS:

Limitations: depth, obstruction

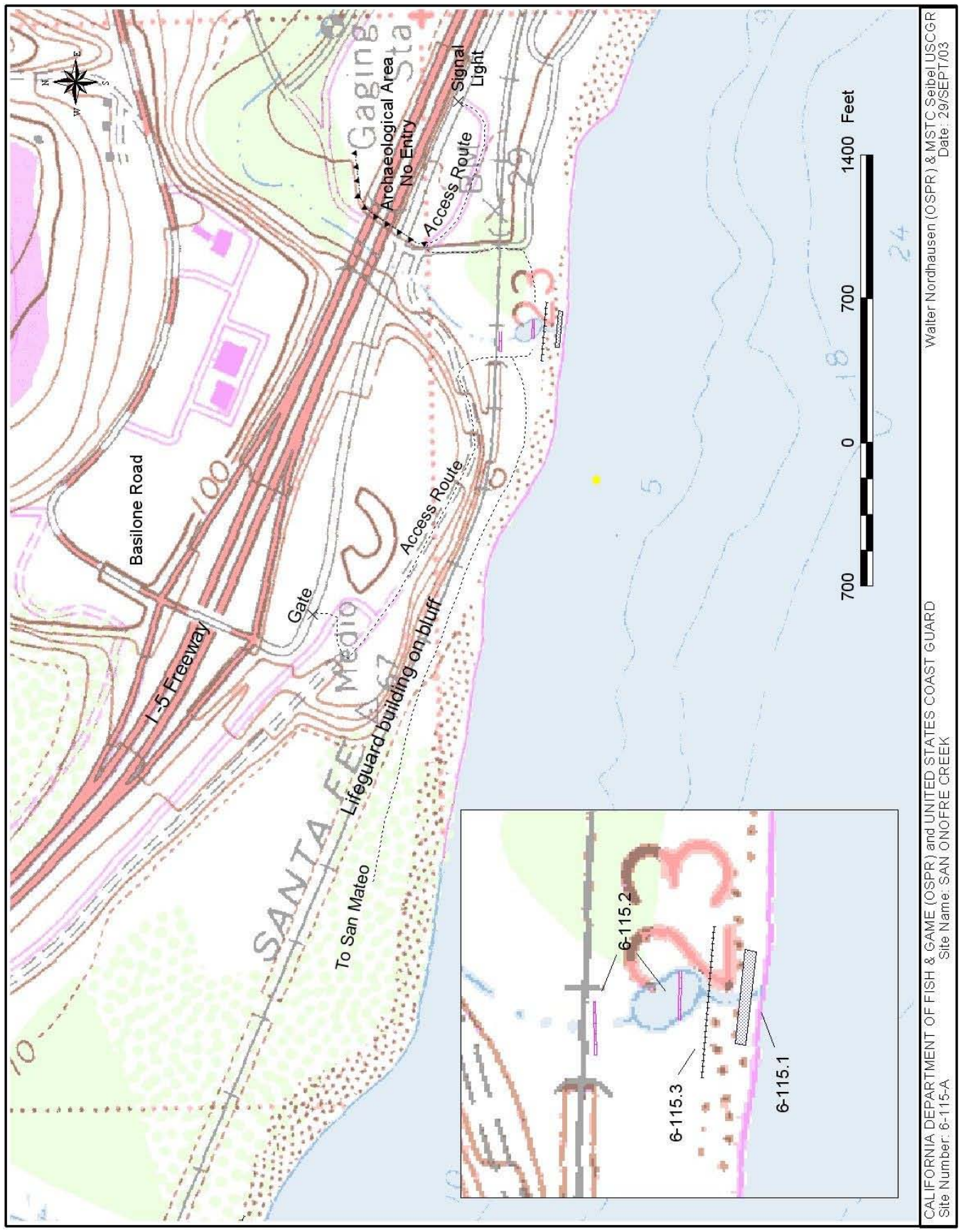
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

staging area is available at the end of Beach Club road at San Onofre lagoon.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:


Archaeological Area
No Entry
Signal Light
Access Route
Basilone Road
I-5 Freeway
Gate
Access Route
Lifeguard building on bluff
To San Mateo
SANTA FE
1400 Feet
700
0
700
6-115.2
6-115.3
6-115.1
Walter Nordhausen (OSPR) & MSTC Seibel USCGR
Date: 29/SEPT/03
CALIFORNIA DEPARTMENT OF FISH & GAME (OSPR) and UNITED STATES COAST GUARD
Site Number: 6-115-A
Site Name: SAN ONOFRE CREEK
Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		33 17'18"	117 27'48"
USGS Quad:	Las Pulgas	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approximately 300 feet wide at entrance. Las Flores Creek is a seasonally active water channel and strongly influenced by seasonal rainfall pattern. During wet winter periods the creek mouth may be open to intertidal exchange. However, most months the creek mouth is closed by a natural sand berm forming a pond of several acres. The creek is a heavily vegetated riparian habitat giving way to substantial emergent marsh plants such as cattail and bulrush in the terminal end of the pond. Numerous species of birds, amphibians, invertebrates, and terrestrial mammals occur here.

SEASONAL and SPECIAL RESOURCE CONCERN

During winter months with good rainfall, the creek mouth may be open. During summer months two listed species of birds may be active in the area.

RESOURCES OF PRIMARY CONCERN

Tidewater goby (a small fish) occurs in this creek pond, consequently any activity in this creek must be with the concurrence of the Camp Pendleton wildlife biologist and US Fish and Wildlife Service. The creek has been reported to also contain the Southwestern pond turtle. California brown pelican are commonly present, and during summer months of April to September California least tern and Western snowy plover may be present along the beach face.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 2 – Notify South Coastal Information center within 24 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E		Camp Pendleton MC Wildlife Biologist	(760) 725-9729
O		Camp Pendleton MC Spill Response Coordinator	(760) 725-9768
O		Camp Pendleton Environmental Security Office	(760) 725-9743
O	Archeologist	Camp Pendleton MC Archeologist	(760) 725-9738
O		US Fish and Wildlife Service (24 hour)	(760) 271-6934
O		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
C		South Coastal Information Center	(619) 594-5682

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 33 17'18 Longitude W: 117 27'48"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Las Flores Creek is a seasonally flowing creek that is strongly subject to rainfall events which will determine if the creek mouth will be open or closed. Most of the year it is closed by a natural sand berm. Only if the creek has recently been opened by flowing water will closure be necessary, but overtopping wave wash may need to be addressed.

Strategy 6-120.1 Objective:

Close the creek mouth by sand berm.

Strategy 6-120.2 Objective:

Deploy absorbent boom across the pond.

Strategy 6-120.3 Objective:

Construct excelsior fencing across the natural sand berm to prevent wash-over of petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-120.1					0		0	0			1	bulldozer delivered to the site	1	
6-120.2				400	0		0	1					3	
6-120.3	0	0			0		0	0			300	fencing and sorbent material	6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Exit I-5 at Las Pulgas Road. At the base of the off-ramp turn left heading west toward the gated fence. Pass through the gate and immediately turn left (south) along the dirt road. Approximately one-half mile south turn right which leads to the beach and the mouth of Las Flores Creek. Approximately 300 feet wide at entrance.

LAND ACCESS: all access available, earth moving equip. approach from beach face.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

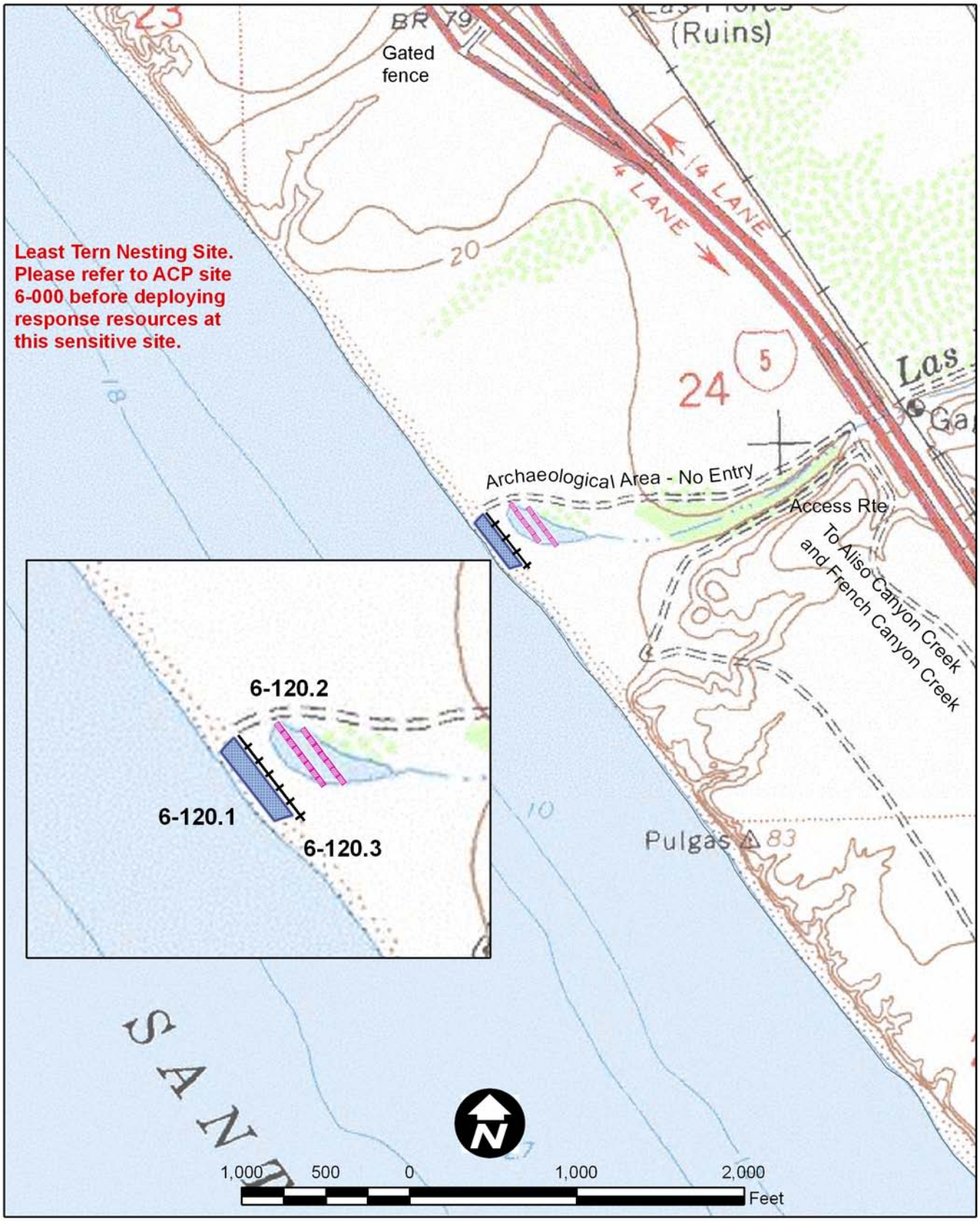
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging is available at the north shore of the lagoon.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

US Marine Corps approval necessary for access.



CDFG-OSPR & USCG Site: 6-120-A Name: Las Flores Creek

Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Aug 27, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

6-125 -A/C Site Summary- Hidden Creek

6-125 -A/C

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		33 15'00"	117 26'20"
USGS Quad:	Las Pulgas	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Hidden Creek is a small seasonal creek that drains rainwater from the Camp Pendleton hills. The creek is situated in a narrow, steep, high banked channel that meanders eastward about 200 yards from the coastal bluff face. During most of the year the creek mouth is closed naturally by a sand berm at the beach face. Only during fairly significant rainfall events does a sufficient amount of water flow to open the creek mouth. It is during those times when the mouth is open that any protection strategy consideration is necessary. Numerous species of birds, amphibians, invertebrates, and terrestrial mammals occur here.

SEASONAL and SPECIAL RESOURCE CONCERN

The creek mouth is open only during the winter months when sufficient rainfall has occurred to open the natural sand berm closure.

RESOURCES OF PRIMARY CONCERN

Tidewater goby (a small fish) occurs year-round in this creek, consequently any activity in this creek must be under the guidance of the base wildlife biologist and US Fish and Wildlife Service. During summer months of April to September California least tern and Western snowy plover may be present along the beach face.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 1 – Notify South Coastal Information Center immediately.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E		Camp Pendleton MC Wildlife Biologist	(760) 725-9729
O		Camp Pendleton MC Spill Response Coordinator	(760) 725-9768
O		Camp Pendleton Environmental Security Office	(760) 725-9743
O	Archeologist	Camp Pendleton MC Archeologist	(760) 725-9738
		US Fish and Wildlife Service (24 hour)	(760) 271-6934
		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
		South Coastal Information Center	(619) 594-5682

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 33 15'00 Longitude W: 117 26'20"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Hidden Creek is a seasonally flowing creek that is strongly subject to rainfall events which will determine if the creek mouth will be open or closed. Most of the year it is closed by a natural sand berm. Only if the creek has recently been opened by flowing water will closure be necessary, but overtopping wave wash may need to addressed

Strategy 6-125.1 Objective:

Close the creek mouth by sand berm.

Strategy 6-125.2 Objective:

Deploy absorbent boom across the narrow creek mouth.

Strategy 6-125.3 Objective:

Construct excelsior fencing across the natural sand berm to prevent wash-over of petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-125.1	0	0			0		0	0			1	bulldozer delivered to the site	1	
6-125.2	0	0		400	0		0	1					3	
6-125.3	0	0			0		0	0			200	fencing and sorbent material	6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Exit I-5 at Las Pulgas Road. At the base of the off-ramp turn left heading west toward the gated fence. Pass through the gate and immediately turn left (south) along the dirt road. Approximately one-half mile south turn right which leads to the beach. At the beach turn south and travel approximately one-half mile to the Hidden Creek channel at the base of the coastal bluff. The high coastal bluff prohibits access of men and equipment from the bluff.

LAND ACCESS:

WATER LOGISTICS:

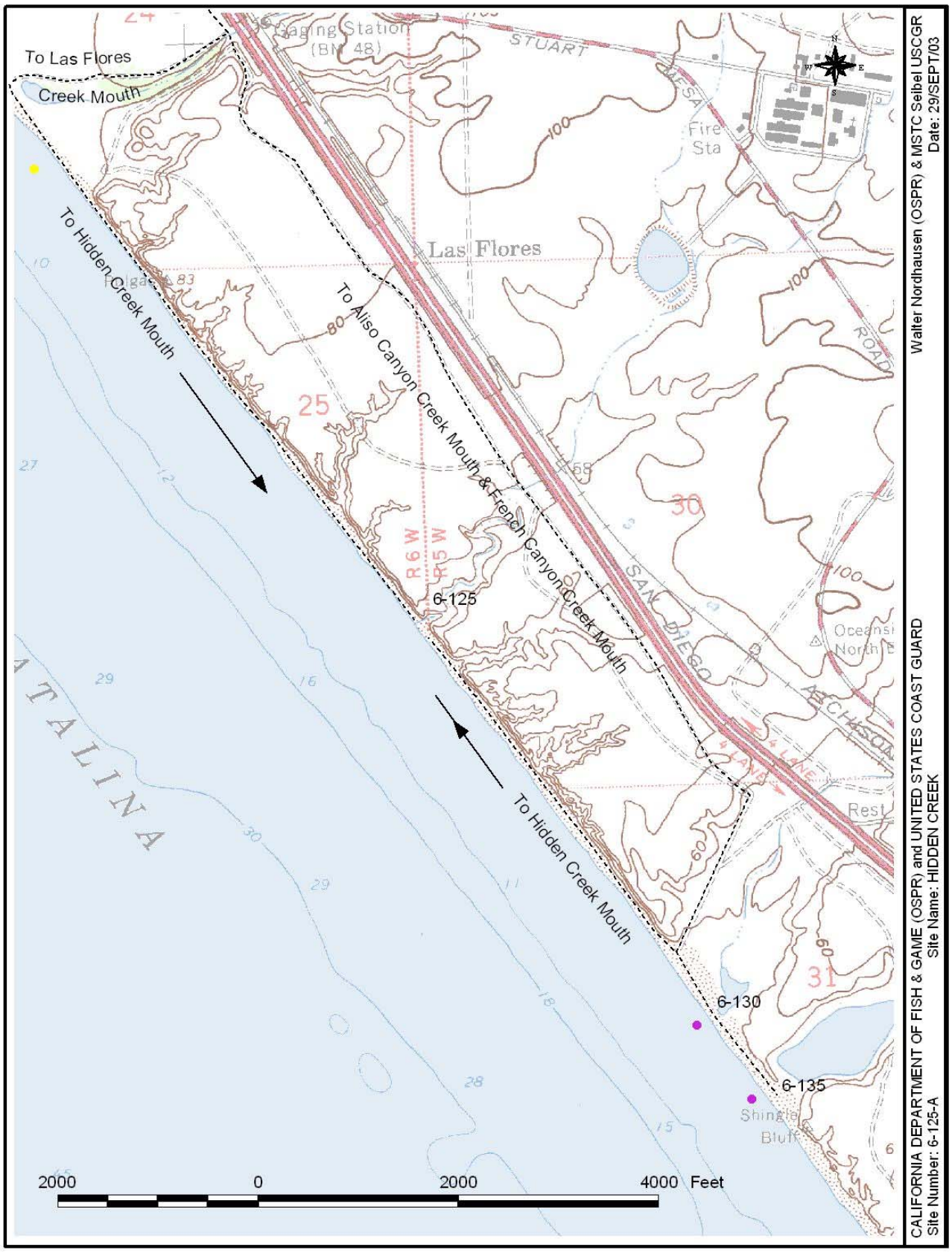
Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		33 15'42"	117 26'26"
USGS Quad:	Las Pulgas	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approx. 100' across. Aliso Canyon Creek is a small seasonal creek that drains rainwater from the Camp Pendleton hills. The small pond at the creek mouth is situated in low erosion bluffs behind the beach face. During most of the year the creek mouth is closed naturally by a sand berm at the beach face. Only during fairly significant rainfall events does a sufficient amount of water flow to open the creek mouth. It is during those times when the mouth is open that any protection strategy consideration is necessary.

SEASONAL and SPECIAL RESOURCE CONCERN

Between April and September California least tern nesting activity may be occurring along the lagoon edge. Western snowy plover may also nest on the adjacent beach.

RESOURCES OF PRIMARY CONCERN

Tidewater goby (a small fish) occurs year-round in this creek, consequently any activity in this creek must be under the guidance of the base wildlife biologist and US Fish and Wildlife Service. During summer months of April to September California least tern and Western snowy plover may be present along the beach face.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E		Camp Pendleton MC Wildlife Biologist	(760) 725-9729
O		Camp Pendleton MC Spill Response Coordinator	(760) 725-9768
O		Camp Pendleton Environmental Security Office	(760) 725-9743
O	Archeologist	Camp Pendleton MC Archeologist	(760) 725-9738
O		US Fish and Wildlife Service (24 hour)	(760) 271-6934
O		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
E		South Coastal Information Center	(619) 594-5682

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 33 15'42 Longitude W: 117 26'26"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Aliso Canyon Creek is a seasonally flowing creek that is strongly subject to rainfall events which will determine if the creek mouth will be open or closed. Most of the year it is closed by a natural sand berm. Only if the creek has recently been opened by flowing water will closure be necessary, but overtopping wave wash may need to be addressed.

Strategy 6-130.1 Objective:

Close the creek mouth by sand berm.

Strategy 6-130.2 Objective:

Deploy absorbent boom across the narrow creek mouth.

Strategy 6-130.3 Objective:

Construct excelsior fencing across the natural sand berm to prevent wash-over of petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-130.1					0		0	0			1	bulldozer delivered to the site	1	
6-130.2				600	0		0	1					3	
6-130.3	0	0			0		0	0			300	fencing and sorbent material	6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From I-5 enter Camp Pendleton at the main gate entrance at Oceanside. Take Vandergrift Road to Stuart Mesa Road to the Las Flores Creek road turn-off. Approx. 100' across.

LAND ACCESS: All access is available but rainfall may cause limitations.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

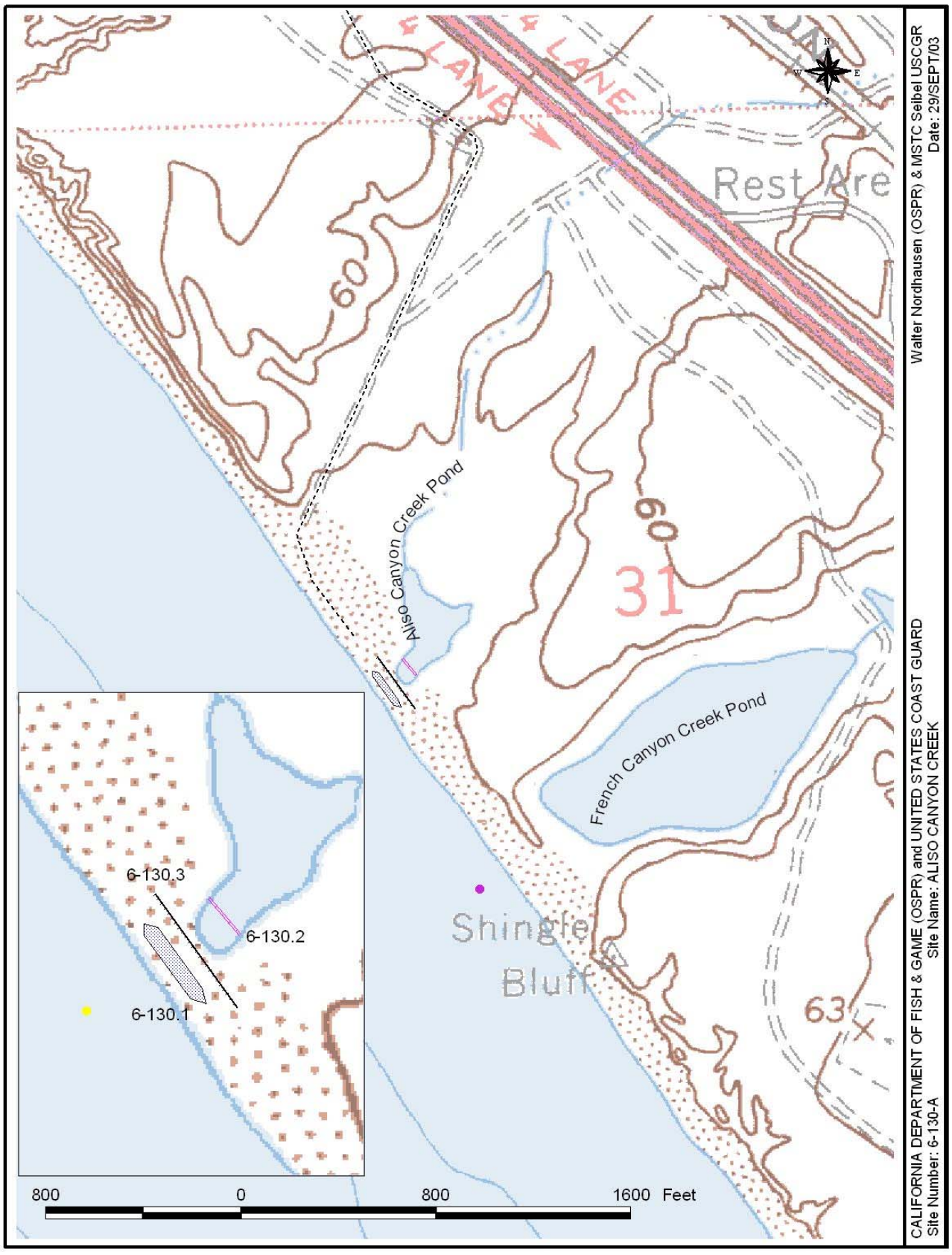
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging is available near the beach at Aliso Canyon Creek.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

US Marine Corps approval is necessary for access.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		33 15'00"	117 25'54"
USGS Quad:	Las Pulgas	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approx. 100 feet wide. French Canyon Creek is a small seasonal creek that drains rainwater from the Camp Pendleton hills. The small pond at the creek mouth is situated in low erosion bluffs behind the beach face. During most of the year the creek mouth is closed naturally by a sand berm at the beach face. Only during fairly significant rainfall events does a sufficient amount of water flow to open the creek mouth. It is during those times when the mouth is open that any protection strategy consideration is necessary.

SEASONAL and SPECIAL RESOURCE CONCERN

Between April and September California least tern nesting activity may be occurring along the lagoon edge. Western snowy plover may also nest on the adjacent beach.

RESOURCES OF PRIMARY CONCERN

Tidewater goby (a small fish) occurs tear-round in this creek, consequently any activity in this creek must be under the guidance of the base wildlife biologist and US Fish and Wildlife Service.. During summer months of April to September California least tern and Western snowy plover may be present along the beach face.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E		Camp Pendleton MC Wildlife Biologist	(760) 725-9729
O		Camp Pendleton MC Spill Response Coordinator	(760) 725-9768
O		Camp Pendleton Environmental Security Office	(760) 725-9743
O	Archeologist	Camp Pendleton MC Archeologist	(760) 725-9738
		US Fish and Wildlife Service (24 hour)	(760) 271-6934
E		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
		South Coastal Information Center	(619) 594-5682

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location **NOAA CHART** **Latitude N** **Longitude W**

San Diego 33 15'00 117 25'54"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

French Canyon Creek is a seasonally flowing creek that is strongly subject to rainfall events which will determine if the creek mouth will be open or closed. Most of the year it is closed by a natural sand berm. Only if the creek has recently been opened by flowing water will closure be necessary, but overtopping wave wash may need to addressed

Strategy 6-135.1 Objective:

Close the creek mouth by sand berm.

Strategy 6-135.2 Objective:

Deploy absorbent boom across the pond.

Strategy 6-135.3 Objective:

Construct excelsior fencing across the natural sand berm to prevent wash-over of petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	type and gear	Boom boat	Skiffs punts	Skimmers No	Type	Special No	Equipment or comment and kinds	staff deploy	Staff tend
6-135.1					0		0	0			1	bulldozer delivered to the site	1	
6-135.2				800	0		0	1					3	
6-135.3	0	0			0		0	0			300	fencing and sorbent material	6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From I-5 enter Camp Pendleton either at the main gate entrance at Oceanside. Take Vandergrift Road to Stuart Mesa Road to the Las Flores Creek road turn-off.

Or, from I-5 take the Las Pulgas Road freeway exit off ramp turn left heading west toward the gated fence. Pass through the gate and immediately turn left (south) along the dirt road and travel about one-half mile to Las Flores Creek.

On the Las Flores dirt road, and immediately west of the freeway, an iron bridge crosses over Las Flores Creek. Take that road over the mesa as it parallels I-5. Behind the freeway rest area, the dirt road descends from the mesa to the beach and the Aliso Creek mouth. French Canyon Creek mouth is about one-quarter mile south on the beach. Approx. 100 feet wide.

LAND ACCESS: All access available, but rainfall may cause limitations.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

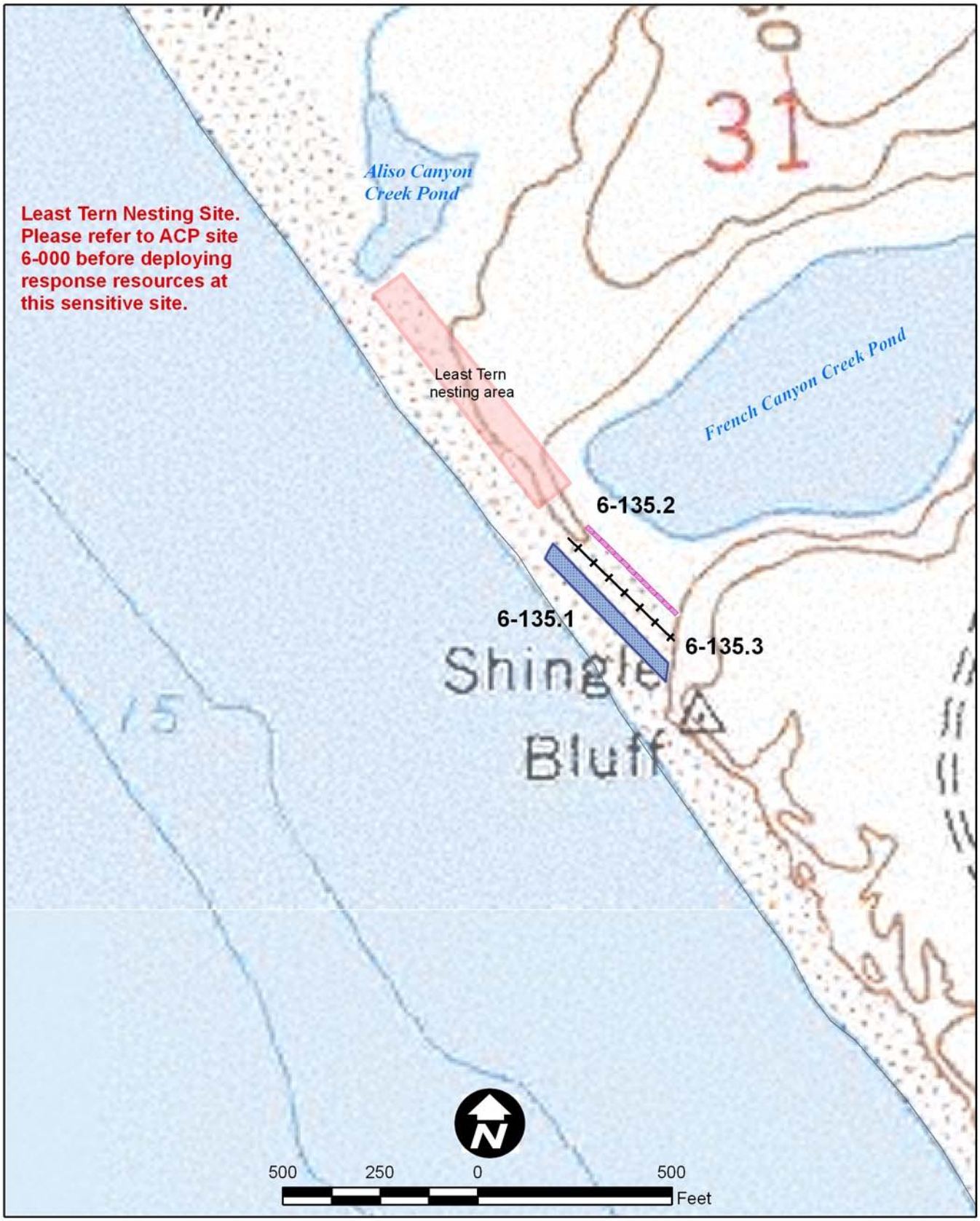
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging area is available near the beach at Aliso Canyon Creek.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

US Marine Corps approval necessary for access.



CDFG-OSPR & USCG Site: 6-135-A Name: French Canyon Creek Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Sept. 3, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		33 14'14"	117 25'18"
USGS Quad:	Las Pulgas	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approximately 100' across. Cockleburr Canyon Creek, Camp Pendleton Marine Corps Base. Normally closed by natural sand berm.

SEASONAL and SPECIAL RESOURCE CONCERN

Between April and September California least tern nesting activity may be occurring along the beach front. Western snowy plover may also nest on the adjacent beach.

RESOURCES OF PRIMARY CONCERN

Tidewater goby (a small fish) and Southwestern pond turtle occur year-round in this creek, consequently any activity in this creek must be under the guidance of the base wildlife biologist and US Fish and Wildlife Service.. During summer months of April to September California least tern and Western snowy plover may be present along the beach face.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E		Camp Pendleton MC Wildlife Biologist	(760) 725-9729
O		Camp Pendleton MC Spill Response Coordinator	(760) 725-9768
O		Camp Pendleton Environmental Security Office	(760) 725-9743
O	Archeologist	Camp Pendleton MC Archeologist	(760) 725-9738
		US Fish and Wildlife Service (24 hour)	(760) 271-6934
E		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
		South Coastal Information Center	(619) 594-5682

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 33 14'14 Longitude W: 117 25'18"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Cockleburr Canyon Creek is a seasonally flowing creek that is strongly subject to rainfall events which will determine if the creek mouth will be open or closed. Most of the year it is closed by a natural sand berm. Only if the creek has recently been opened by flowing water will closure be necessary, but overtopping wave wash may need to be addressed.

Strategy 6-140.1 Objective:

Close the creek mouth by sand berm.

Strategy 6-140.2 Objective:

Deploy absorbent boom across the pond.

Strategy 6-140.3 Objective:

Construct excelsior fencing across the natural sand berm to prevent wash-over of petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-140.1					0		0	0			1	bulldozer delivered to the site	1	
6-140.2	0	0		800	0		0	1					3	
6-140.3	0	0			0		0	0			300	fencing and sorbent material	6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Cockleburr Canyon Creek is a small seasonal creek that drains rainwater from the Camp Pendleton hills. The small pond at the creek mouth is situated in low erosion bluffs behind the beach face. During most of the year the creek mouth is closed naturally by a sand berm at the beach face. Only during fairly significant rainfall events does a sufficient amount of water flow to open the creek mouth. It is during those times when the mouth is open that any protection strategy consideration is necessary. Approximately 100' across.

LAND ACCESS: All access available.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

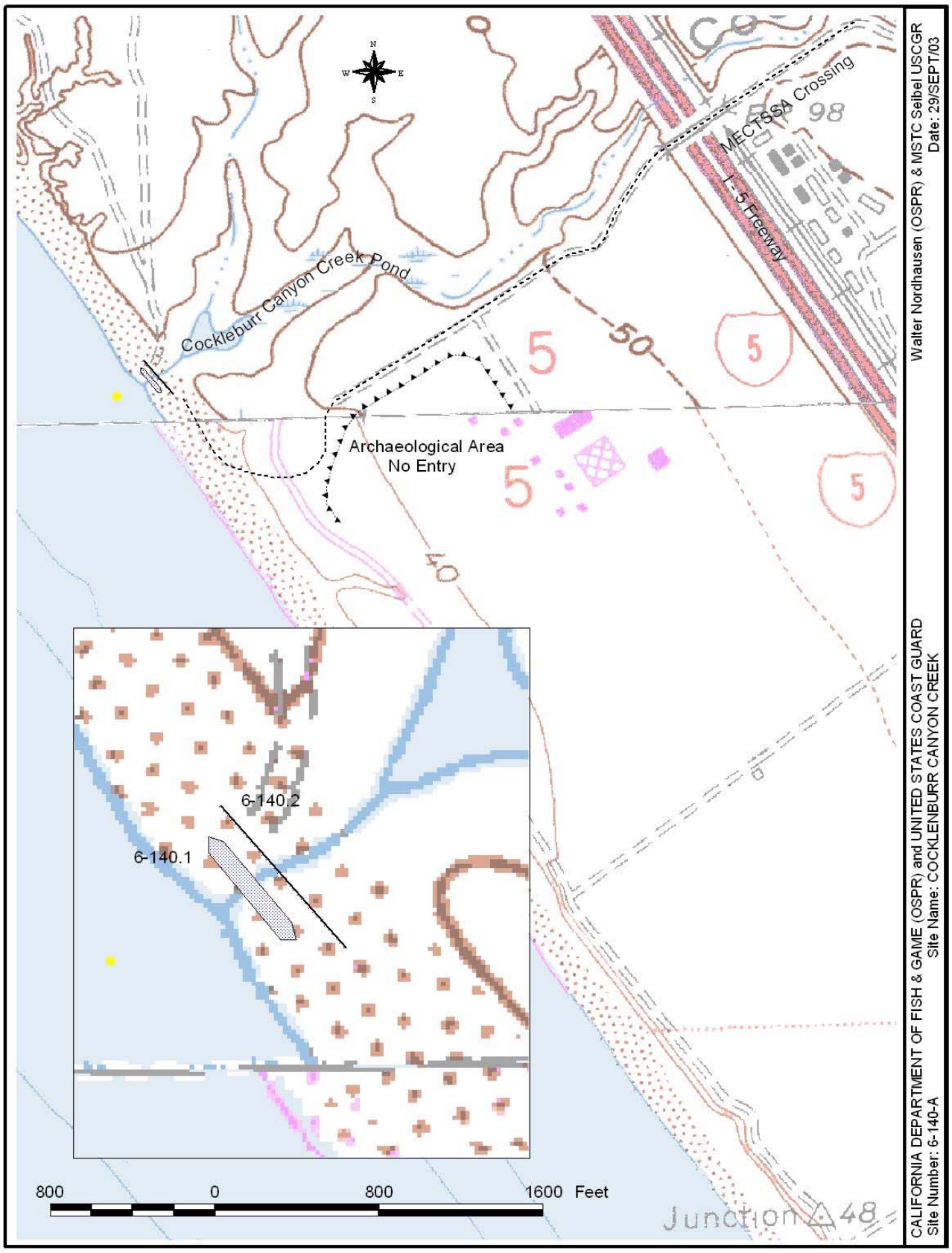
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging area is available at the bluff top.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

US Marine Corps approval necessary for access.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		33 13'48"	117 24'54"
USGS Quad:	Oceanside	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approximately 500' at entrance. The Santa Margarita River is a substantial river system within San Diego County. The status of the mouth opening is dependant on several variables. If recent rainfall activity has occurred, the river mouth is likely to be open. During summer and autumn months heavy surf activity may have closed the mouth with a sand berm. When the river mouth is open, a substantial tidal flow is possible, depending upon prevailing tidal conditions. Water depth in the river channel can vary from several inches to several feet, but most water depths are expected to be less than 3 feet near the river mouth at low tide. The river mouth may reach 300 to 500 feet wide to secure by sand berm closure. The beach face is expected to provide ample sand for mouth closure purposes.

SEASONAL and SPECIAL RESOURCE CONCERN

California least terns and Western snowy plovers are expected to be present nearby the river mouth on nesting sites between April and September. A fenced California least tern nesting area is immediately north of the river mouth.

RESOURCES OF PRIMARY CONCERN

Tidewater goby (a small fish) may occur in the river, consequently any activity in the river must be with the concurrence of the Camp Pendleton wildlife biologist and US Fish and Wildlife Service. Belding's savannah sparrow and Light-footed clapper rail are present year round and will likely be nesting in the lagoon vegetation during summer. California brown pelican routinely utilize the river and open coastal waters for feeding a resting. During summer months of April to September California least tern and Western snowy plover may be present along the beach face.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 2 – Notify South Coastal Information Center within 24 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E		Camp Pendleton MC Wildlife Biologist	(760) 725-9729
O		Camp Pendleton MC Spill Response Coordinator	(760) 725-9768
O		Camp Pendleton Environmental Security Office	(760) 725-9743
O	Archeologist	Camp Pendleton MC Archeologist	(760) 725-9738
		US Fish and Wildlife Service (24 hour)	(760) 271-6934
E		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
		South Coastal Information Center	(619) 594-5682

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 33 13'48 Longitude W: 117 24'54"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The Santa Margarita River is a substantial coastal tidal inlet. If the river mouth is open a significant effort will be required to close, or protect it. Inside the river mouth are hundreds of acres of tidal marsh and wetland habitat. A sand berm closure will likely require a berm about 300 feet in length. Underflow capability may be warranted.

Strategy 6-145.1 Objective:

Close the river mouth by sand berm.

Strategy 6-145.2 Objective:

Deploy harbor boom across the river channel.

Strategy 6-145.3 Objective:

Construct excelsior fencing across the natural sand berm to prevent wash-over of petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	and kinds	staff deploy	Staff tend
6-145.1					0		0	0			2	bulldozers delivered to the site	2	
6-145.2	3000				8		2	0					8	
6-145.3		0			0		0	0			400	fencing and sorbent material	6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Enter Camp Pendleton at the main gate in Oceanside. Take Vandergrift Road to Stuart Mesa Road. From Stewart Mesa Road take the first left turn on to the dirt road immediately past the river bridge crossing. Directly beneath the I-5 freeway bridge a small boat ramp is available to launch skiffs and booming equipment. Continue along this dirt road which skirts the perimeter of the agriculture field about one-half mile to a beach access road. The Santa Margarita River mouth is about one-quarter mile south. Four wheel drive vehicles are strongly recommended on this beach. Approximately 500' at entrance.

LAND ACCESS: All access available, walk or 4-wheel drive on beach may be needed

WATER LOGISTICS: Several inches-several feet

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

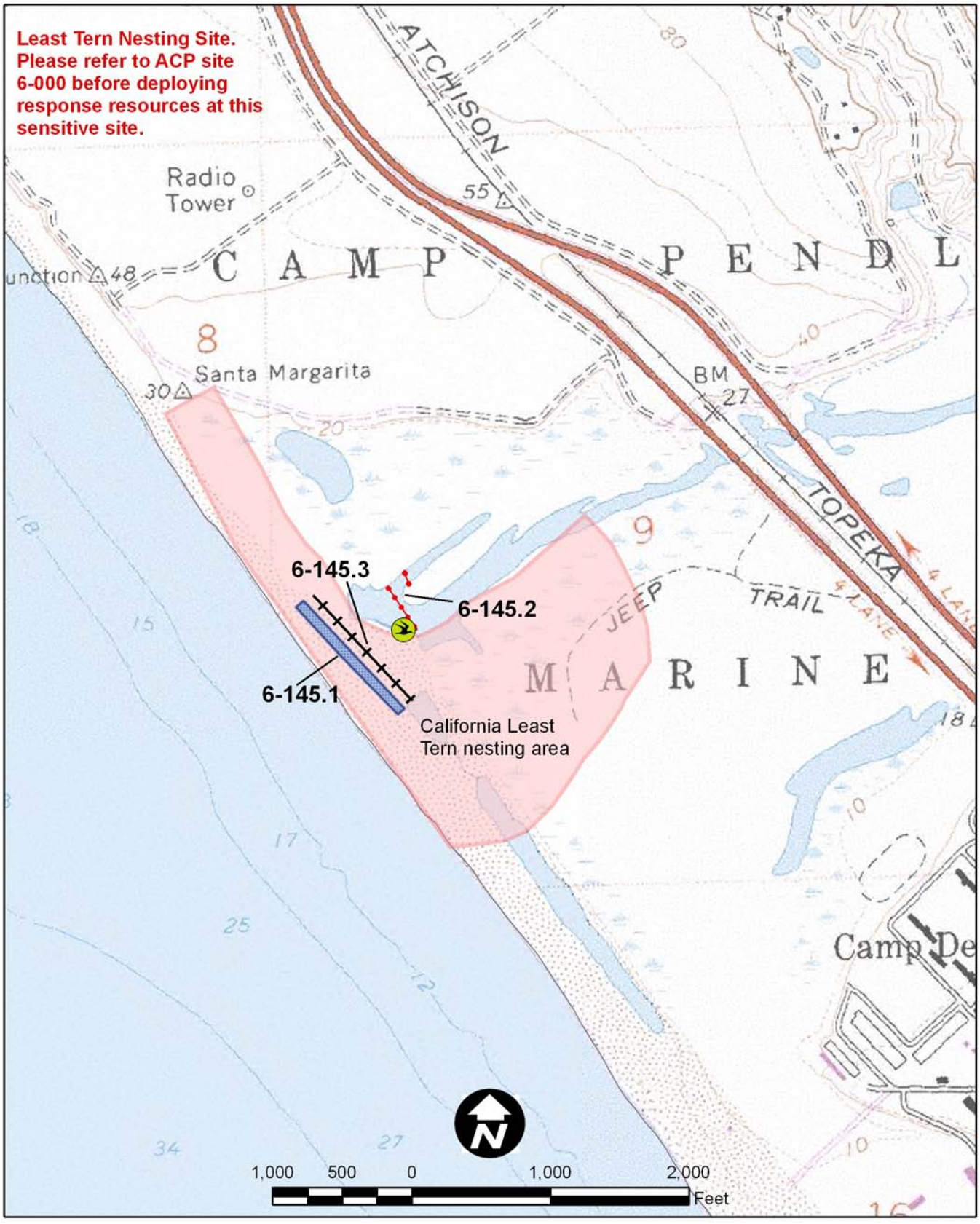
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging is limited to the bluff area .05 mile north of river mouth, and beach face on the south side of river mouth during winter months when Least Tern nesting is not occurring.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

US Marine Corps approval necessary for access.



CDFG-OSPR & USCG Site: 6-145 Name: Santa Margarita River

Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Aug. 27, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		33 12'00"	117 23'24"
USGS Quad:	Oceanside	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approximately 50' wide. The San Luis Rey River is permanently blocked by a low-overflow dam and road bed. It has several underflow pipes at the north end of the road to allow low-flow discharge of river water.

SEASONAL and SPECIAL RESOURCE CONCERN

Spring and summer months endangered species may be present and this site is an "A" priority, in the autumn and winter if the river mouth is open this site is considered an "A" priority, in the autumn and winter if the river mouth is closed then the site is "C" priority.

RESOURCES OF PRIMARY CONCERN

Numerous species of birds, invertebrates, terrestrial mammals, and emergent vegetation occur here seasonally. California brown pelicans (an endangered bird species) are expected to be present in the west end of river year-round. Western snowy plover and California least tern (listed bird species) may be nesting on the beach during summer.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
C		CA Dept of Fish and Game	(858) 467-4201
O		US Fish and Wildlife Service (24 hour)	(760) 271-6934
O		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
O		South Coastal Information Center	(619) 594-5682

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location **NOAA CHART** **Latitude N** **Longitude W**

San Diego 33 12'00 117 23'24"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The San Luis Rey River mouth has had significant engineering modifications. Protection of this site requires only that seven low-flow, crossing road culvert pipes (approx. 24" diameter) located at the north side of the river be blocked by plywood or sand bags. The blockage should be installed initially on the up-stream (east) side of the crossing road. Down-stream (west) blockage may be considered to prevent contamination of the under flow pipes.

Strategy 6-150.1 Objective:

Block the flow of high tide water into the river channel by blocking the crossing road underflow pipes. Plywood squares for individual pipe openings, and sandbags to brace plywood in position.

Strategy 6-150.2 Objective:

Replicate the up-stream blockage equipment.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-150.1					0		0	0				7 plywood squares 2 x 2 feet, 4 shovels, 100 sand	4	
6-150.2					0		0	0				7 plywood squares 2 x 2 feet, 4 shovels, 100 sand	4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Exit I-5 at Harbor Drive in Oceanside. Follow Harbor Dr. toward the south side of the marina and west toward the beach. At parking lot is located at the river mouth. Approximately 50' wide.

LAND ACCESS: All access available

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

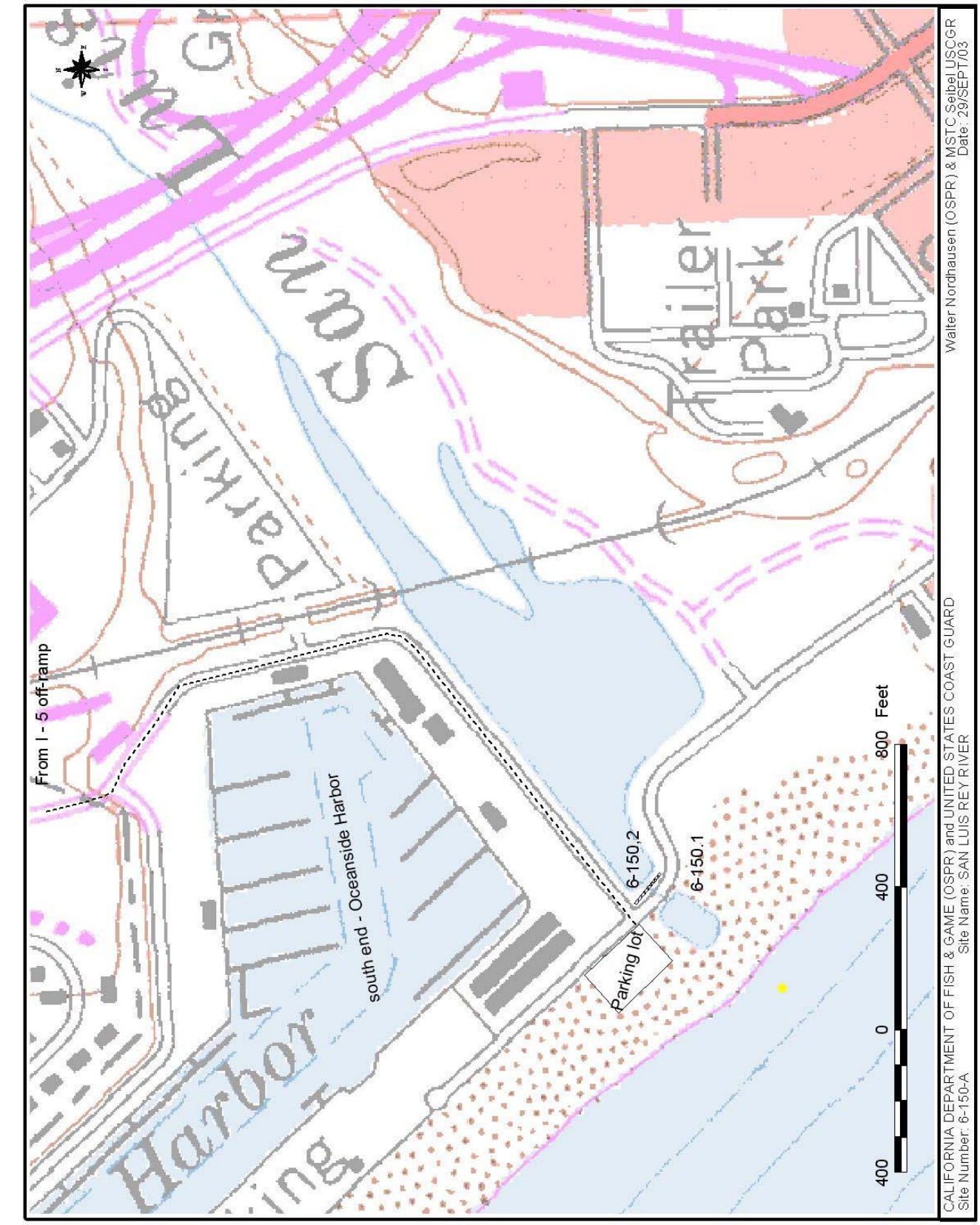
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging area is available at the river mouth parking lot on the north side of the river crossing road.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

Heavy equipment may be used to close the river mouth on the downstream side of the river crossing when endangered species are not present during periods of low river flow. Nesting sites may be vulnerable to all traffic (vehicular of foot). Consult biologist prior to any action during spring and summer months.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

6-155 -A Site Summary- Agua Hedionda Lagoon

6-155 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		33 08'42"	117 20'42"
USGS Quad:	San Luis Rey	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Entrance approximately 200' wide. Agua Hedionda Lagoon is a large coastal lagoon with a substantial tidal prism. From the coastline the lagoon reaches eastward about 1.5 mile. Protecting the lagoon opening is significantly important for environmental and economic reasons. In addition to the substantial lagoon surface area are extensive rip-rap shoreline and intertidal mudflats areas. The lagoon also supports the Encina power plant and two aquaculture facilities.

SEASONAL and SPECIAL RESOURCE CONCERN

Seasonally variable concentrations of birds use the river channel.

RESOURCES OF PRIMARY CONCERN

Numerous species of birds, invertebrates, terrestrial mammals, submerged and emergent vegetation occur here both year round and seasonally. California brown pelicans are expected to be present in the lagoon year-round. Belding's savannah sparrow and Light-footed clapper rail are present year round and will likely be nesting in the lagoon vegetation during summer. Western snowy plover and California least tern may be feeding on the water or shoreline during summer.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
C		CA Dept of Fish and Game	(858) 467-4201
O		US Fish and Wildlife Service (24 hour)	(760) 271-6934
O		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
O		South Coastal Information Center	(619) 594-5682

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 33 08'42 Longitude W: 117 20'42"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:
Pipeline located one-half mile inland from ocean. Contact Santa Fe Pipeline (213) 624-9461 or (213) 624-9462.

SITE STRATEGIES

Agua Hedionda Lagoon is a large coastal inlet permanently open to tidal exchange. During tidal changes the entrance channel current velocity can become very rapid. Currents may exceed 6 to 8 knots as water rounds the outside elbow bend of the north shoreline. The protection strategy, as designed, has been tested under relatively high current velocity. It is intended to deflect floating petroleum to the shoreline south of the mid-bay inlet channel.

Strategy 6-155.1 Objective:

Deflection boom configured to create a double sided channel to direct petroleum on the east side of the fore-bay to provide an accessible shoreline for skimmer recovery operations. The east boom segment is 1,400 feet long. The west boom segment is 2,100 feet long.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	type and gear	Boom boat	Skiffs punts	Skimmers No	Type	Special Equipment or comment No	and kinds	staff deploy	Staff tend
6-155.1	3500				10	anchor systems	2	0	1				8	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)
Protection strategy equipment can be deployed along the lagoon shoreline immediately east of Coast highway south of the lagoon entrance channel. Contact Encina power plant personnel for access approval. Entrance approximately 200' wide.

LAND ACCESS: All access available.

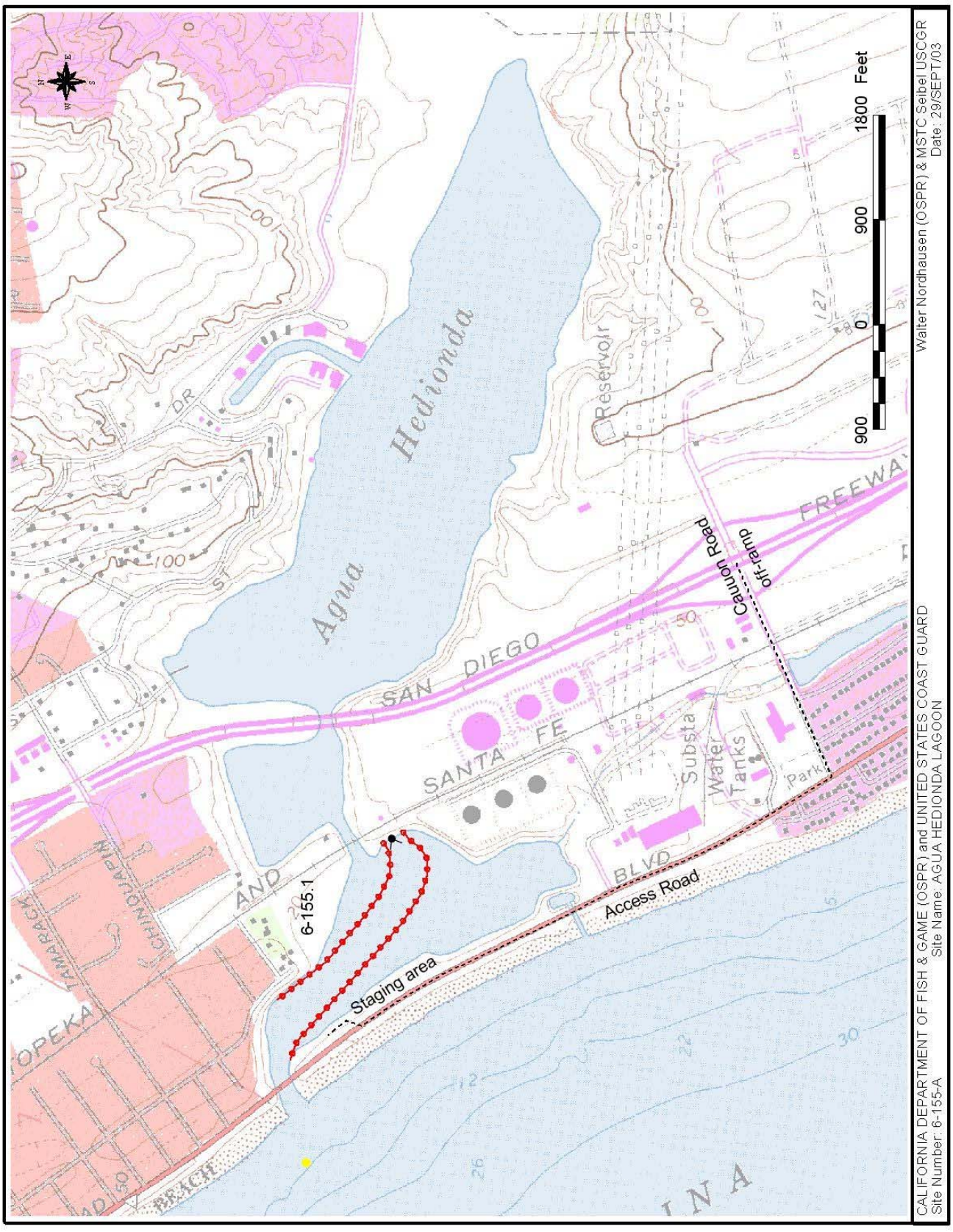
WATER LOGISTICS:
Limitations: depth, obstruction
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:
Staging areas are found off Pacific Coast Hwy on the western shore of the lagoon and immediately north of the northern jetty at the public parking lot. Boat launch ramps are located at SDG&E power plant and east of I-5 on the inner lagoon.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

Operators of the Power Plant and the two Aquaculture Facilities should be notified immediately.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		33 05'12"	117 18'48"
USGS Quad:	Encinitas	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approximately 100' wide. Batiquitos is a large intertidal lagoon that reaches inland approximately 1.5 miles from the coast. It is traversed by Pacific Coast Highway, a rail road trestle, and the Interstate 5 freeway. Due to its large tidal prism, the entrance channel experiences significant tidal flows that achieve velocities in excess of 10 knots. Beneath the I-5 bridge, the tidal current may exceed 6 knots. The shoreline is a combination of sand and mud, with a broad exposed mudflat in much of the area east of I-5 during low tide. East of I-5 the bottom is covered with an expansive eelgrass bed. Numerous species of birds, fishes, invertebrates, terrestrial mammals, submerged and emergent vegetation occur here.

SEASONAL and SPECIAL RESOURCE CONCERN

California least tern nest at three constructed nesting areas during April to September. Western snowy plovers may also utilize these sites.

RESOURCES OF PRIMARY CONCERN

California brown pelican are observed in the lagoon year-round. Western snowy plover and California least tern may be nesting on areas inside the lagoon during summer. The eastern lagoon vegetated wetland is year round habitat for Belding's savannah sparrow and Light-footed clapper rail and they will likely be nesting in the marsh vegetation during summer.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 1 – Notify South Coastal Information Center immediately.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
C		CA Dept of Fish and Game	(858) 467-4201
O		US Fish and Wildlife Service (24 hour)	(760) 271-6934
O		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
O		South Coastal Information Center	(619) 594-5682

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 33 05'12 Longitude W: 117 18'48"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Batiquitos Lagoon is a large coastal lagoon permanently open to tidal exchange. Entrance channel water velocity can reach 10 to 12 knots during large tidal variations. Boat access into the channel is limited to passage through the outer channel jetties for anything larger than a skiff. No boats can access the inner lagoon via the entrance channel because of the low cross members of the train trestle. Inside the lagoon, skiffs may be launched from two potential locations, although some limitations are possible. Heavy equipment, such as utility boats, must be placed in the lagoon by crane staged on the I-5 freeway bridge. COLLECTION POINT: Collection will be very difficult in this lagoon due to the very poor accessibility to most areas. Much work will be achieved by hand and foot. Response crews will be required to hand deliver and remove a large portion of the equipment.

Strategy 6-160.1 Objective:

Deflection boom deployed in the entrance channel to deflect petroleum toward small embayments on the north and south side of the entrance channel for skimmer removal east of the PCH bridge.

Strategy 6-160.2 Objective:

Containment boom deployed inside the lagoon east of the rail road trestle to deflect petroleum toward the northwest corner of the lagoon for skimmer removal. Response equipment that can not be lifted manually from two potential shoreline locations must be lifted by crane on the I-5 bridge.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-160.1	1200				6	anchor systems	1	0	2				9	
6-160.2	1200				6	anchor systems	0	3	1				10	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Access into Batiquitos Lagoon is a significant challenge. The lagoon has very limited access potential. Because of the rail road trestle no boats can enter via the entrance channel. On the interior, only light skiffs can be launched from two potential boat entry points: on the north side east of I-5 near the interpretive center; and on the south side, east of I-5 across the California least tern nesting area – but only during non-nesting season. Any heavy equipment could potentially be hoisted into the lagoon by crane from the I-5 bridge. Approximately 100' wide.

LAND ACCESS:

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: Strong tidal currents. Response vessels are restricted to the west side of the railroad trestle- no clearance.

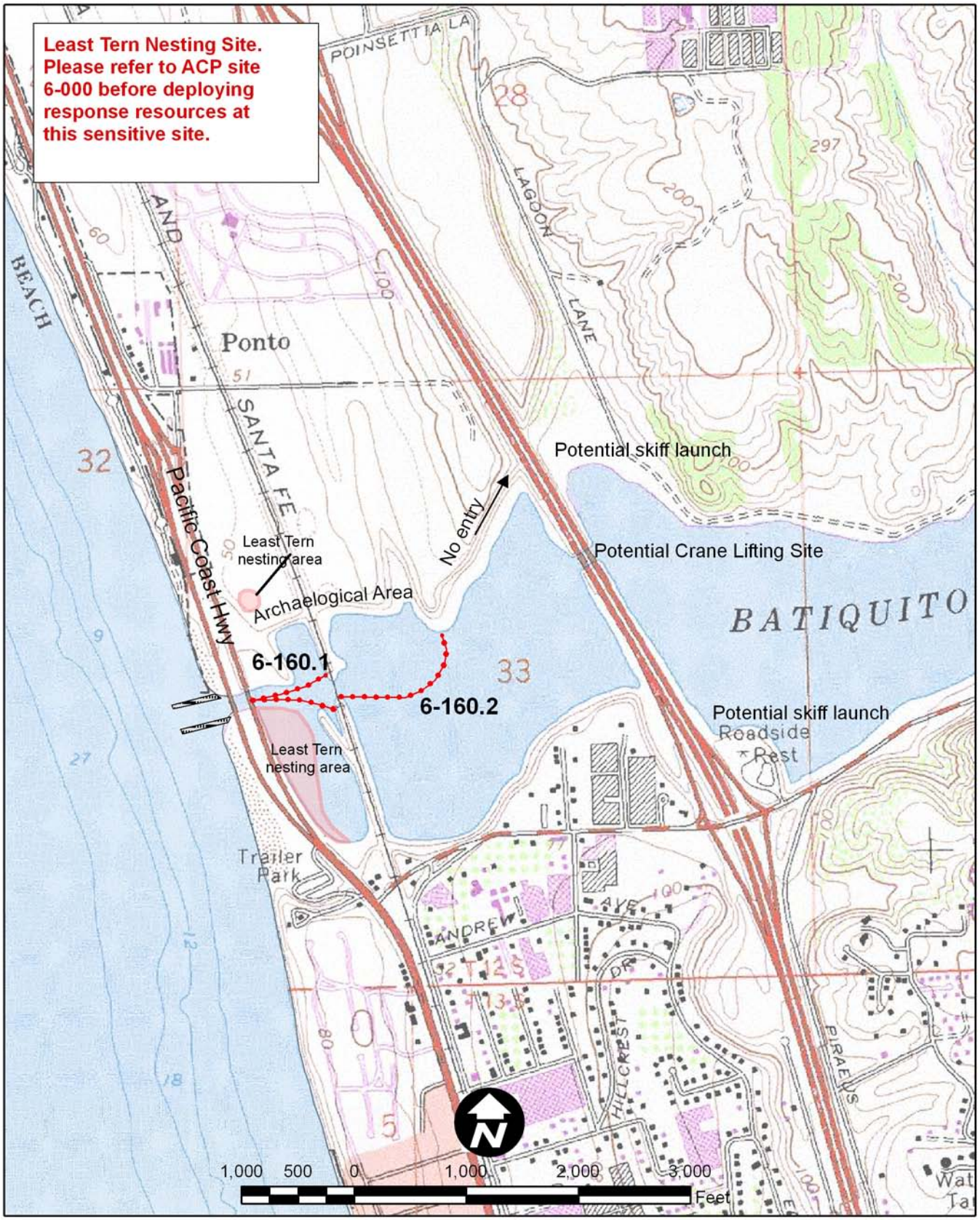
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging area is available adjacent to Pacific coast Hwy on the north and south sides of the lagoon mouth.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

Least Terns nest in this area.



CDFG-OSPR & USCG Site: 6-160 Name: Batiquitos Lagoon

Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Sept. 3, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

6-165 -A Site Summary- San Elijo Lagoon

6-165 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		33 01'00"	117 16'54"
USGS Quad:	Encinitas	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

San Elijo Lagoon is a large coastal wetland that reaches approximately 1.5 mile inland from the coast. It contains a large intertidal mudflat and wetland vegetation habitat that provides food and shelter to a large complex of wildlife resources. During low tide when the lagoon mouth is open, a vast area of mudflat is exposed.

SEASONAL and SPECIAL RESOURCE CONCERN

California least tern, and Western snowy plover are potentially nesting in the lagoon area during April to September.

RESOURCES OF PRIMARY CONCERN

Numerous species of birds, invertebrates, terrestrial mammals, submerged and emergent vegetation occur here both seasonally and year-round. California brown pelican, Belding's savannah sparrow and Light-footed clapper rail are present year-round and will likely be nesting in the marsh vegetation during summer.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		Del Mar Police/Sheriffs	(858) 484-3154
E		CA Dept of Parks and Recreation	(858) 642-4200
C		CA Dept of Fish and Game	(858) 467-4201
		South Coastal Information Center	(619) 594-5682
B		CA State Parks and Recreation (24 hour)	(909) 443-2969
E		San Diego County Parks and Recreation	(619) 525-8222

ADDITIONAL SITE SUMMARY COMMENTS:

6-165 -A Site Strategy - San Elijo Lagoon

6-165 -A

County and Thomas Guide Location
San Diego

NOAA CHART

Latitude N	Longitude W
33 01'00	117 16'54"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

San Elijo Lagoon is strongly influenced by a seasonally flowing creek which is responsive to rainfall events that will determine if the creek mouth will be open or closed. Most of the year it is closed by natural sand/gravel berms. Only if the lagoon has recently been opened by flowing water, or the periodic mouth blockage breeching with heavy equipment, will closure be necessary. Overtopping wave wash may need to be addressed.

Strategy 6-165.1 Objective:

Close the lagoon mouth by sand/gravel berm.

Strategy 6-165.2 Objective:

Deploy a two-tiered harbor boom across the entrance channel east of the PCH bridge.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-165.1					0		0	0			1	bulldozer delivered to the site	1	
6-165.2	400				0		0	1					4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Access to the lagoon mouth is available from Pacific Coast Highway and the Cardiff State Beach parking lot.

LAND ACCESS: All access available.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

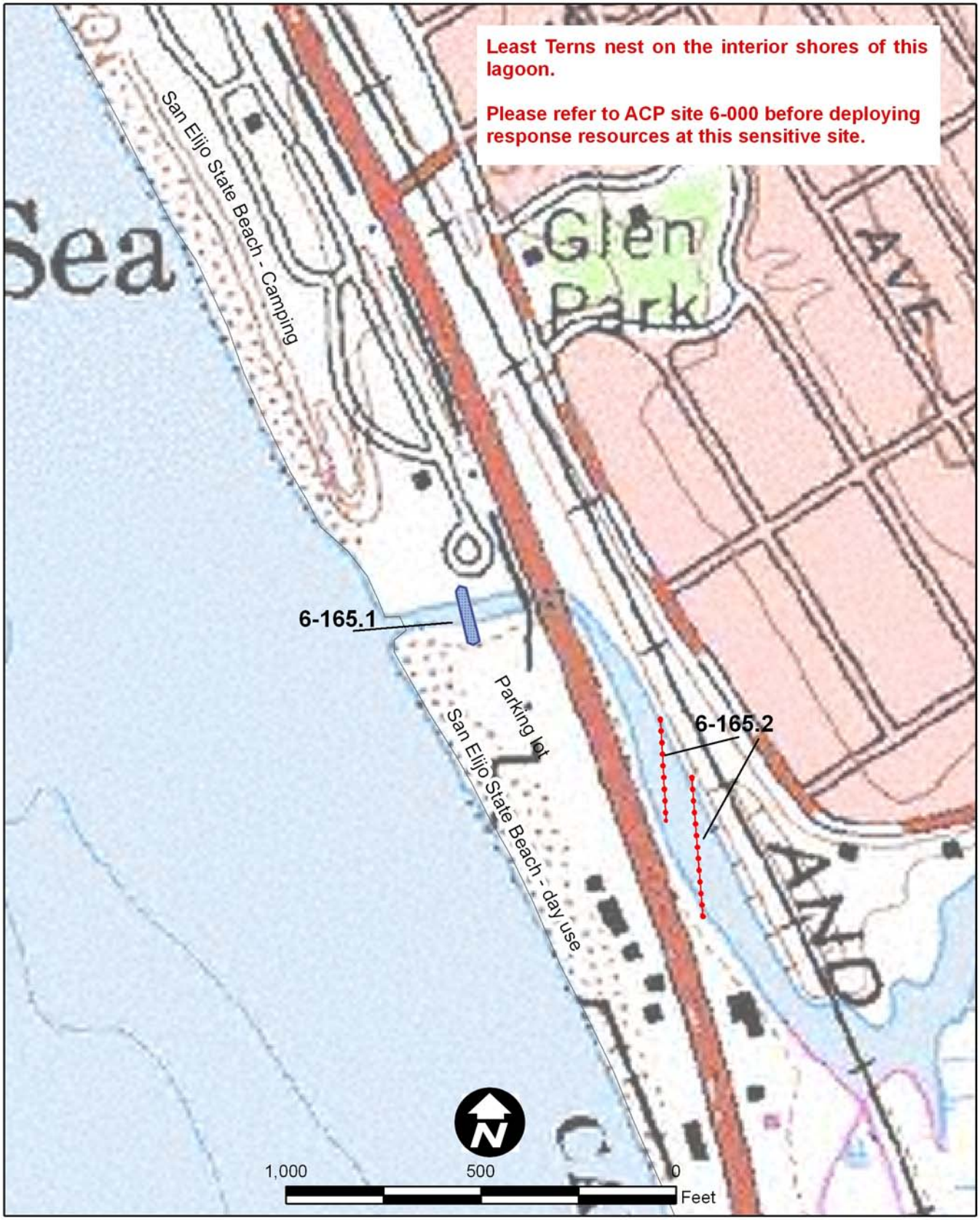
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging area is located in the State Park parking lot immediately south of the lagoon mouth.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

This lagoon area is managed by County Parks and the CA Dept of Fish & Game.



CDFG-OSPR & USCG Site: 6-165 Name: San Elijo Lagoon Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Sept. 3, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 58'30"	117 16'12"
USGS Quad:	Del Mar	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approximately 100-1000 feet wide depending on rain conditions. San Dieguito Lagoon is a large coastal lagoon that is an extension of the San Dieguito River which reaches well into eastern San Diego County. The status of the lagoon mouth is strongly influenced by rainfall pattern. During the winter, rainfall can maintain an open lagoon mouth. During summer, the mouth is typically closed by a natural sand berm. The lagoon and river segments generally affected by tidal influences reach about 2.5 miles east of the lagoon mouth.

SEASONAL and SPECIAL RESOURCE CONCERN

California least tern, Western snowy plover are potentially nesting in the lagoon area during April to September.

RESOURCES OF PRIMARY CONCERN

Numerous species of birds, invertebrates, terrestrial mammals, and emergent vegetation occur here seasonally. California brown pelican are expected to be present year-round. Belding's savannah sparrow are present year round and will likely be nesting in the lagoon vegetation during summer.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 2 – Notify South Coastal Information Center within 24 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		Del Mar Police/Sheriffs	(858) 484-3154
C		CA Dept of Fish and Game	(858) 467-4201
O		US Fish and Wildlife Service (24 hour)	(760) 271-6934
O		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location **NOAA CHART** **Latitude N** **Longitude W**

San Diego 32 58'30 117 16'12"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

San Dieguito Lagoon is strongly influenced by the seasonally flowing river which will be influenced by rainfall events that will determine if the lagoon mouth will be open or closed. Most of the year it is closed by a natural sand berm. Only if the lagoon has recently been opened by flowing water, or the periodic mouth blockage breeching with heavy equipment, will closure be necessary. Overtopping wave wash is not expected to occur due to the physical features of this site.

Strategy 6-170.1 Objective:

Close the lagoon mouth by sand berm.

Strategy 6-170.2 Objective:

Deploy two-tiered harbor boom diagonally across the channel on the east side of PCH bridge.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special No	Special and Equipment or comment kinds	staff deploy	Staff tend
6-170.1					0		0	0			1	bulldozer delivered to the site	1	
6-170.2	600				0		0	1					4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

The lagoon mouth is easily accessed from Pacific Coast Highway. Approximately 100-1000 feet wide depending on rain conditions.

LAND ACCESS: All access available.

WATER LOGISTICS:

Limitations: depth, obstruction

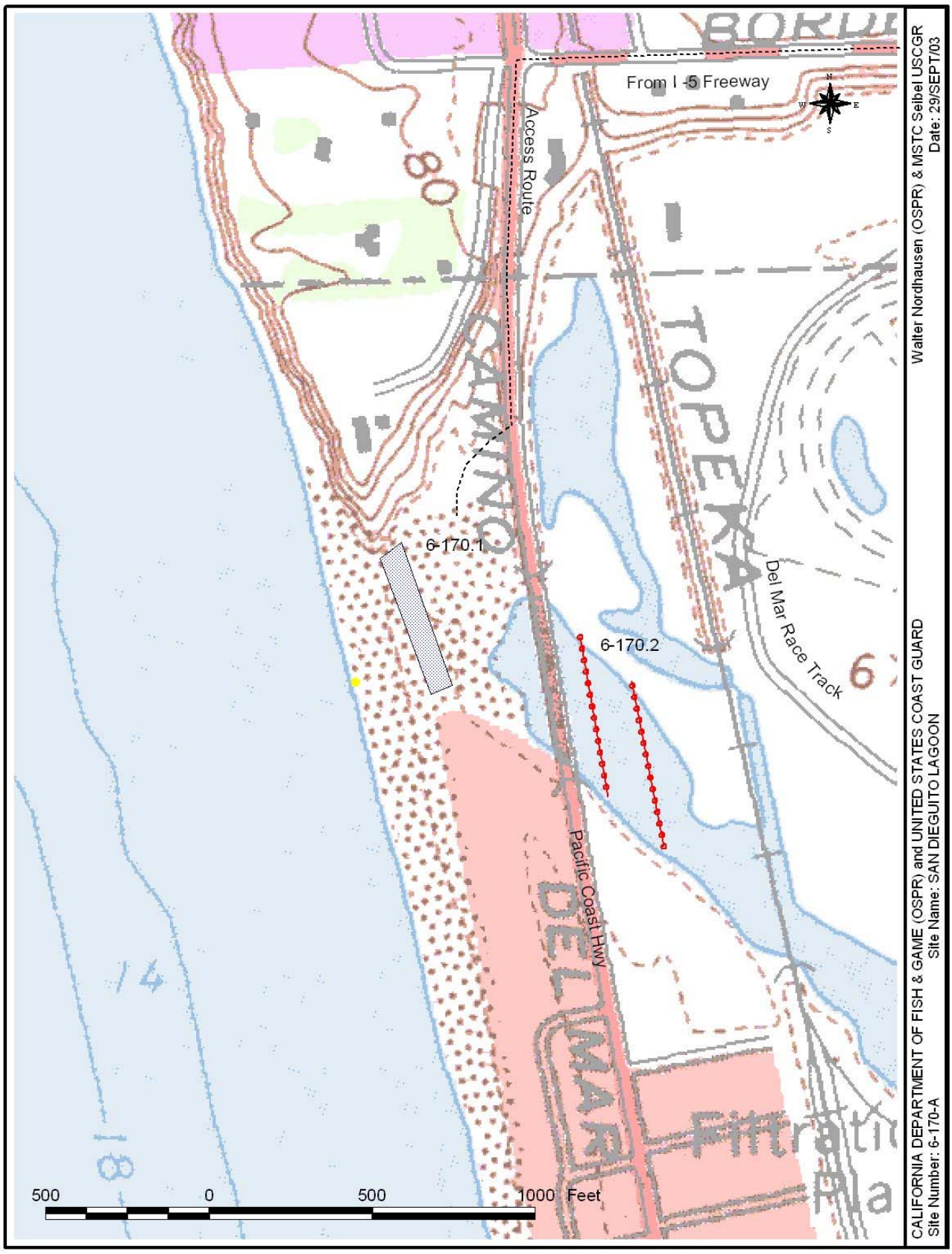
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

The Del Mar fairgrounds or a small staging area is located just west of the PCH at the north end of the bridge.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 56'00"	117 15'36"
USGS Quad:	Del Mar	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approximately 300 feet wide at the widest point. Los Penasquitos Lagoon is a large coastal estuary covering several hundred acres. The lagoon is characterized by having two primary tidal channels that are relatively deep To the east the channels become braded and meandering as they branch into several smaller channels about 1.5 mile inland from the lagoon mouth. The entire lagoon supports a large expanse of pickle weed and cord grass.

SEASONAL and SPECIAL RESOURCE CONCERN

Nesting and feeding California least terns and Western snowy plover during April to September.

RESOURCES OF PRIMARY CONCERN

Numerous species of birds, invertebrates, terrestrial mammals, and emergent vegetation occur here. California brown pelican and are expected to be present in the lagoon year-round. Belding's savannah sparrow and Light-footed clapper rail are present year round and will likely be nesting in the marsh vegetation during summer. Western snowy plover and California least tern may be nesting on the beach during summer.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
C		CA Dept of Fish and Game	(858) 467-4201
O		US Fish and Wildlife Service (24 hour)	(760) 271-6934
O		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
O		CA Dept of Parks and Recreation	(909) 443-2969
B	District Supervisor	CA Dept of Parks and Recreation	(949) 492-0802
E	Resource Ecologist	CA Dept of Parks and Recreation	(949) 497-1421
O		South Coastal Information Center	(619) 594-5682

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 56'00 Longitude W: 117 15'36"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Los Penasquitos Lagoon is strongly influenced by the water flow conditions of Los Penasquitos Creek, which will be strongly influenced by rainfall events. The level of accumulated runoff water will determine if the lagoon mouth will be open or closed. Generally, during summer months the lagoon mouth is closed by a natural sand berm. Although, this lagoon is open more than most of the San Diego coastal lagoons. Overtopping wave wash is not expected to occur due to the physical features of this site.

Strategy 6-175.1 Objective:

Close the lagoon mouth by sand berm.

Strategy 6-175.2 Objective:

Deploy exclusionary harbor boom across the two primary tidal channels inside the lagoon, east of the PCH bridge.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-175.1					0		0	0			1	bulldozer delivered to the site	1	
6-175.2	400				0		0	0					4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From Pacific Coast Highway a the north end of Torrey Pines State Beach, take Carmel Valley Road to McGonigle Road then turn into the State Park parking lot. Parking and staging area is available near the lagoon mouth. A beach access road is located under the PCH bridge. Approximately 300 feet wide at the widest point.

LAND ACCESS: All access available.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

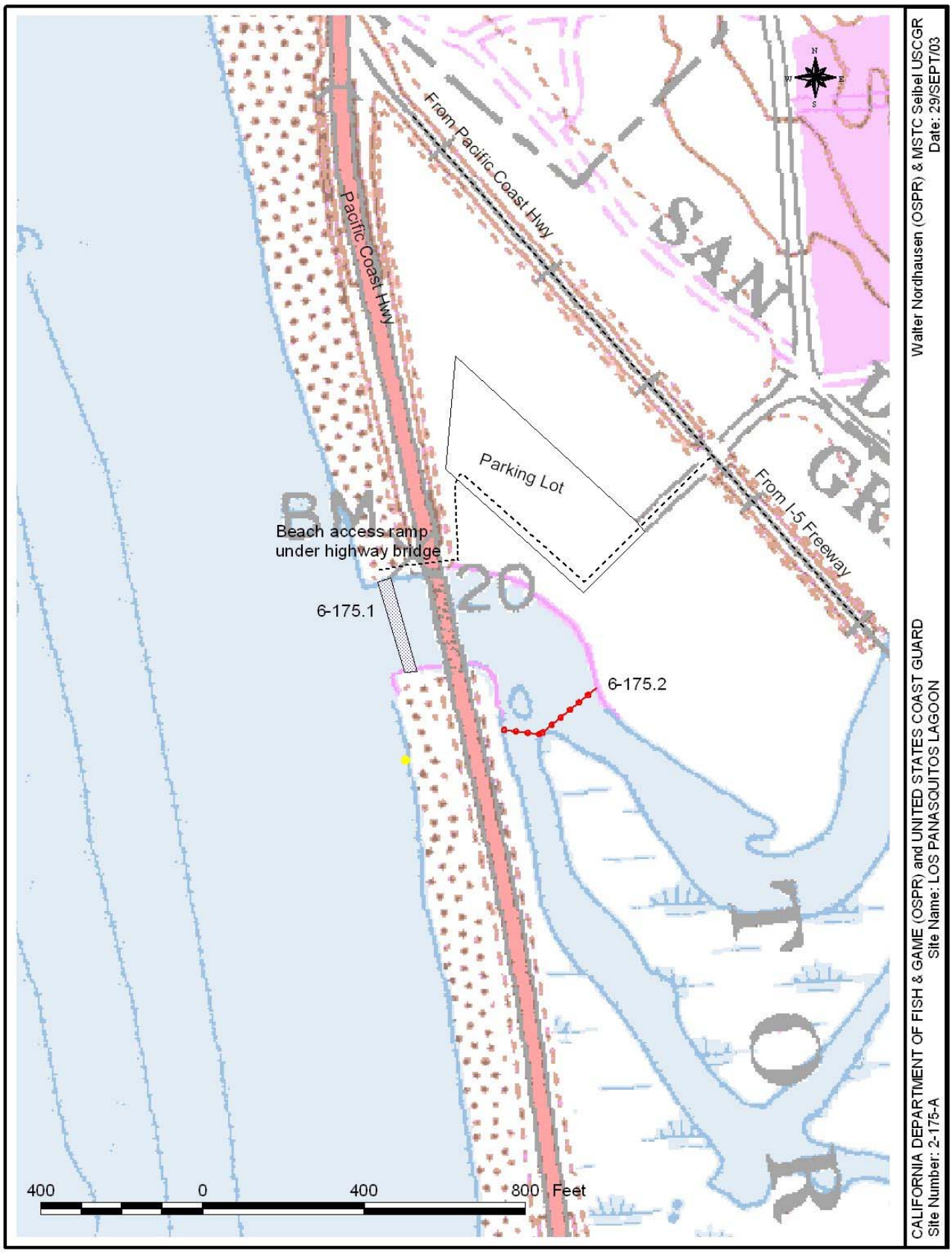
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Parking and staging areas are available at the mouth of the lagoon. State beach parking lot off McGonagle road on north side of lagoon mouth.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

Snowy Plover nest directly on the beach and are found in this area.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 50'50"	117 16'38"
USGS Quad:	La Jolla	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

The La Jolla Children's Pool area has become established as a favorite haul-out site for Harbor seals. Adult and pup seals are routinely present in numbers up to 50.

SEASONAL and SPECIAL RESOURCE CONCERN

None identified

RESOURCES OF PRIMARY CONCERN

Harbor seals

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		CA Dept of Fish and Game	(858) 467-4201
		South Coastal Information Center	(619) 594-5682
		National Marine Fisheries Service	(562) 980-4017

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location
San Diego

NOAA CHART

Latitude N 32 50'50 Longitude W 117 16'38"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The La Jolla Peninsula site is specifically identified as the La Jolla Children's Pool. The site has become established as a Harbor seal haul-out site. Because of the very rugged coastline along the La Jolla peninsula, few protection strategy options are available.

Strategy 6-180.1 Objective:

Deploy boom tow array boats offshore of this site to intercept arriving petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special No	Special and	Equipment or comment kinds	staff deploy	Staff tend
6-180.1	1500				0		8	0						8	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Boat launch facilities are located at Mission Bay. Beach access is available at Coast Blvd. off Prospect Street. Limited parking and staging are available.

LAND ACCESS: Streets in the area are narrow with sharp curves. Foot access only.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

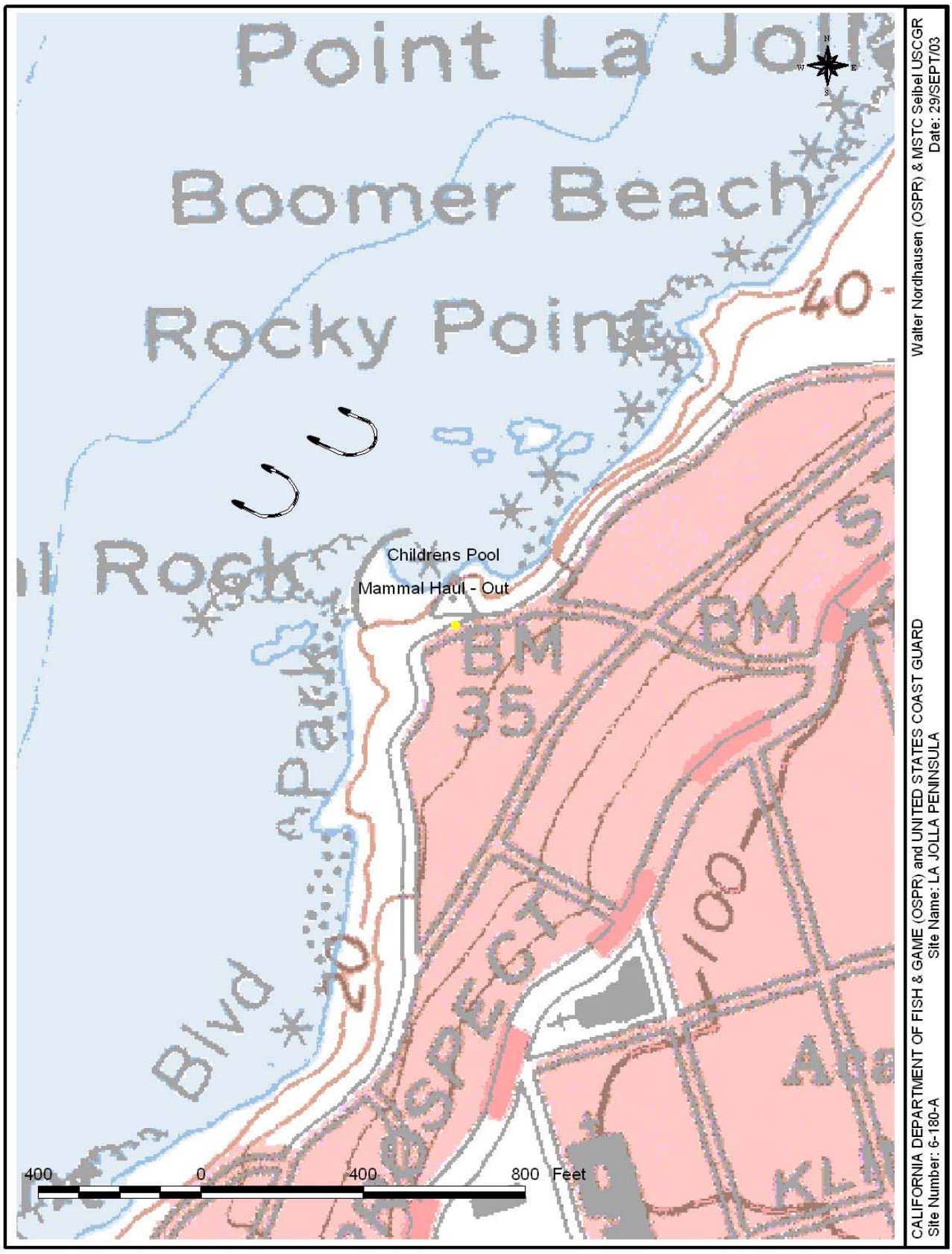
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Limited staging area is available.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

The public access infrastructure to the beach is antiquated and has not been updated.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 45'24"	117 15'30"
USGS Quad:	La Jolla	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approx. 500' wide. Mission Bay Entrance and San Diego River complex is approximately three-quarters mile long. The entire channel is constructed of large boulder rip-rap. The south jetty has been engineered with a " notch" about one-half mile in to aid in movement of storm flow water from the San Diego River located immediately adjacent to the entrance channel south jetty. These two channels are integrated into a single response strategy with several prioritized components. Numerous species of birds, intertidal invertebrates, and wetland vegetation are present in this complex environmental setting.

SEASONAL and SPECIAL RESOURCE CONCERN

During April to September California least terns and Western snowy plovers may be actively feeding in the bay. A healthy nesting colony of California least terns exists on the mud flats of the Sand Diego River estuary immediately up stream from the protection boom deployment for this site. Response efforts should strive to prevent any oiling of this fenced nesting habitat.

RESOURCES OF PRIMARY CONCERN

California brown pelicans feed and rest in the bay year round. Light-footed clapper rail occur in the wetland habitat of the San Diego River upstream from the West Mission Bay Drive bridge, where Belding's savannah sparrow nest in summer months. The Nutalls lotis, a listed plant, is found in the sand bar area down stream from the bridge.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		Mission Bay Harbor Patrol/Lifegaurds	(619) 224-2708
C		CA Dept of Parks and Recreation	(909) 443-2969

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 45'24 Longitude W: 117 15'30"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The Mission Bay Entrance channel and San Diego River mouth are combined into a single response strategy due to their close association. The flood notch on the separation jetty assures that during most high tide conditions, water exchange will occur. In addition, the south jetty is porous and will allow exchange of floating oil under virtually any condition. Experiments with rice hulls has demonstrated a that floating materials will collect near the channel's outer-elbow mid-point.

The response strategy is comprised of six individual segments numbered in the order of their respective deployment priority. The degree to which the full complement is deployed is dependent upon the severity of the protection need.

Strategy 6-200.1 Objective:

Mission Bay entrance channel from the north-channel side at Mariner Basin to the easterly end of the south channel jetty. The boom should be deployed with sufficient angle to allow deflection of petroleum to the southeas attachment point for skimmer operations.

Strategy 6-200.2 Objective:

Across the San Diego River from the entrance channel south jetty's east end, toward the river channels sand beach south-shore. The boom should be deployed with sufficient angle to allow deflection of petroleum to the southeast attachment point A shallow capture basin can be created in the south shore sand to facilitate skimmer operations.

Strategy 6-200.3 Objective:

Across the entrance channel (west-east) from Mariner Basin to the Quivira Basin breakwater. The boom should be deployed with sufficient angle to allow deflection of petroleum to the northeast at the Quivira Basin attachmen point (south of the basin inlet) for skimmer operations.

Strategy 6-200.4 Objective:

Across the entrance channel (west – east) from the shoreline north of Mariners Cove inlet to a point south of the Mission Bay Drive bridge on the Quivira Basin shoreline. The boom should be deployed with sufficient angle to allow deflection of petroleum to the northeast at the Quivira Basin attachment point (north of the basin inlet) for skimmer operations.

Strategy 6-200.5 Objective:

Close off the inlet of Quivira Basin. This should include coverage of the Quivira Basin inlet breakwater which is porous.

Strategy 6-200.6 Objective:

Close off the inlet of Mariner Basin.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-200.1	800				2	anchor systems	0	0	1				4	
6-200.2	700				2	anchor systems	0	0	1				3	
6-200.3	400	0		0	1	anchor system	0	0	1		0		2	
6-200.4	400	0		0	1	anchor system	0	0	0		0		2	
6-200.5	400	0		0	1	anchor system	0	0	1		0		2	
6-200.6	300	0		0	1	anchor system	0	0	0		0		2	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

A boat launch ramp is located in the Dana basin. Access to the lower reach of the San Diego River is available from the parking lot near the beach at Ocean Beach. Approx. 500' wide.

LAND ACCESS: All access available.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

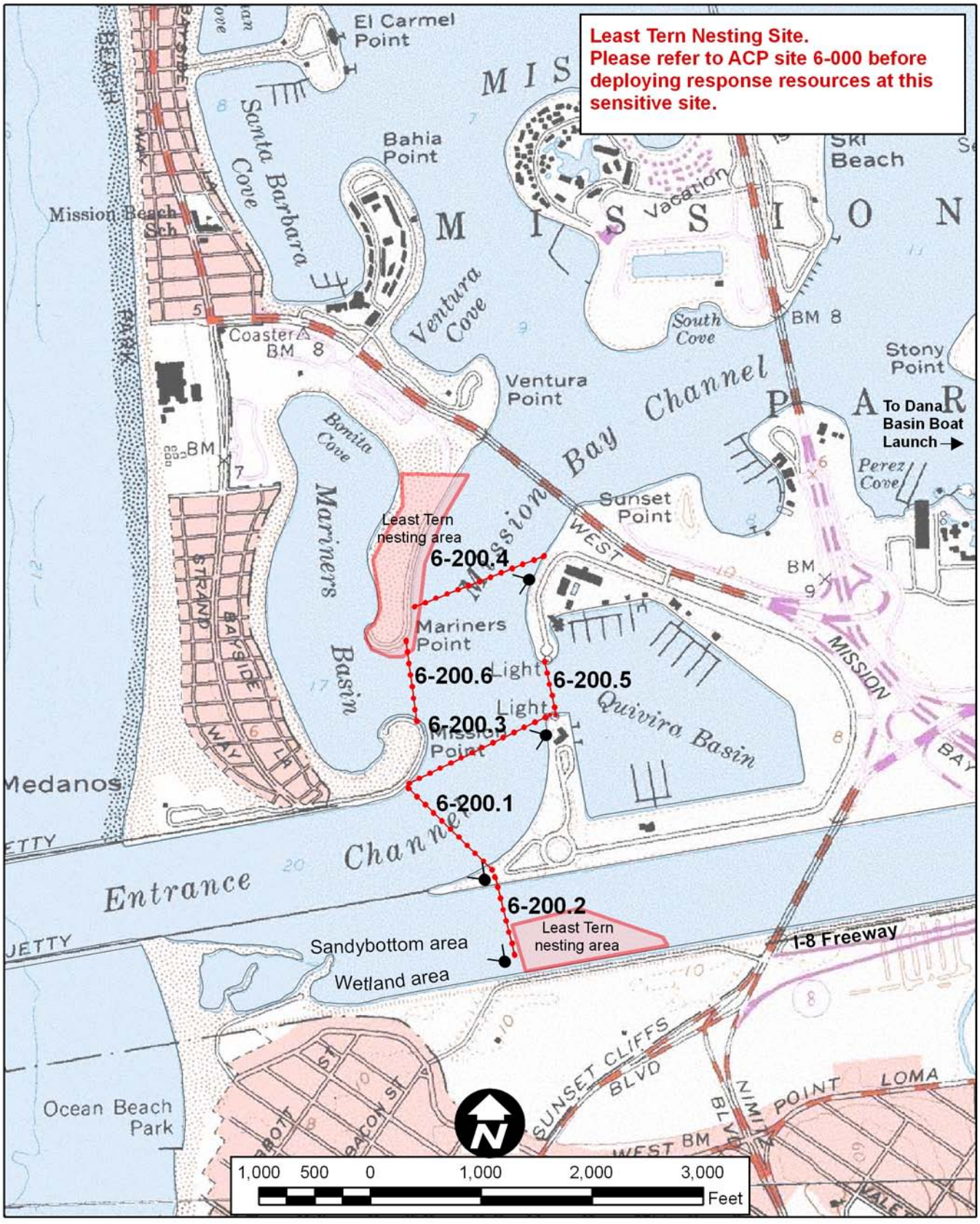
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Numerous parking and staging areas are located around the bay.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

This is a popular beach area with lots of public use year round.



CDFG-OSPR & USCG Site: 6-200-A Name: Mission Bay Entrance / San Diego River Mouth Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Aug. 27, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

6-205 -A Site Summary- San Diego River Mouth

6-205 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 45'18"	117 15'12"
USGS Quad:	La Jolla	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

The mouth of the San Diego River empties into the Pacific at the north end of Ocean Beach with an outflow that is typically about 100' across but subject to change with seasonal rainfall. The flood channel of the river is approximately 400 meters across and has earthen levies with rip rap armoring.
The area to protect is the estuary that is up stream from the mouth. Average tidal influence in the river extends two to three miles up stream. The estuary is at some risk to oiling when the mouth is open on an incoming tide. San Diego River mouth-City of San Diego.

SEASONAL and SPECIAL RESOURCE CONCERN

Snowy Plover nesting spring through summer, migrating birds present autumn and winter.
A healthy nesting colony of California least terns exists on the mud flats of the Sand Diego River estuary immediately up stream from the river mouth. Response efforts should strive to prevent any oiling of this fenced nesting habitat.

RESOURCES OF PRIMARY CONCERN

San Diego River has numerous species of birds; autumn migratory birds, and intertidal sandflats and mudflats.

Snowy plover and California least tern can use this area for nesting in April through August.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
C		CA Dept of Parks and Recreation	(909) 443-2969

ADDITIONAL SITE SUMMARY COMMENTS:

Site Strategy - San Diego River Mouth

6-205 -A

County and Thomas Guide Location
San Diego

NOAA CHART

Latitude N 32 45'18 **Longitude W** 117 15'12"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Strategy 6-205.1 Objective:

Construct sand berm across entrance, upstream from breakwater notch. River mouth may be closed by sand berm or oil boom, except during periods of rainfall, when a large discharge volume may occur.

Strategy 6-205.2 Objective:

Second berm at forward downstream end of breakwater notch.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	and kinds	staff deploy	Staff tend
6-205.1					0		0	0						
6-205.2					0		0	0						

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Access via Ocean Beach parking lot. The mouth of the San Diego River empties into the Pacific at the north end of Ocean Beach with an outflow that is typically about 100' across but subject to change with seasonal rainfall. The flood channel of the river is approximately 400 meters across and has earthen levies with rip rap armoring.
The area to protect is the estuary that is up stream from the mouth. Average tidal influence in the river extends two to three miles up stream. The estuary is at some risk to oiling when the mouth is open on an incoming tide.

LAND ACCESS: All access available

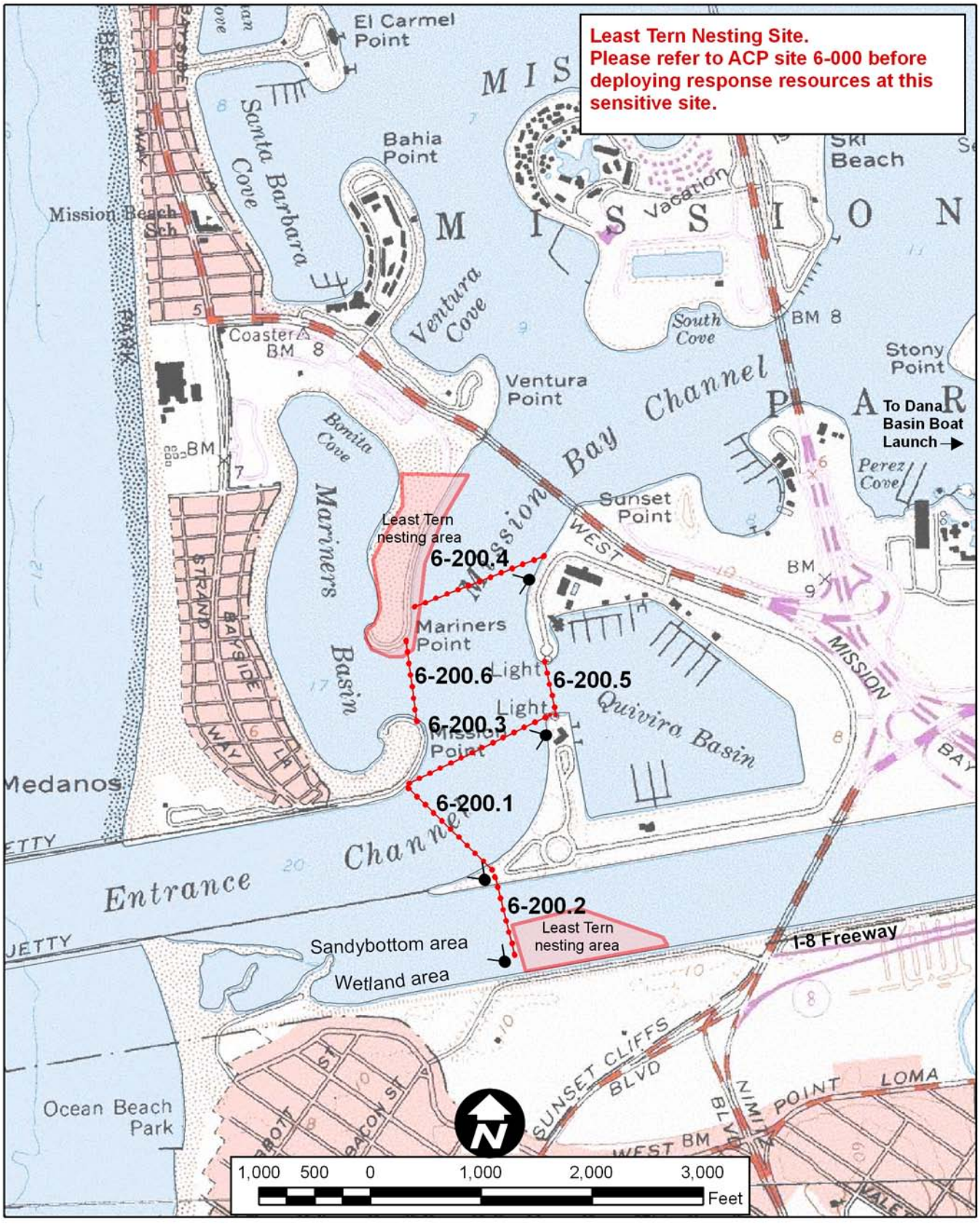
WATER LOGISTICS:
Limitations: depth, obstruction
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:
Ocean Beach parking lot.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

The City of San Diego and Mission Bay Harbor Patrol control access to parking and staging areas on the north and south sides of the river mouth.



CDFG-OSPR & USCG Site: 6-200-A Name: Mission Bay Entrance / San Diego River Mouth Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Aug. 27, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 47'37	117 13'00"
USGS Quad:	La Jolla	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

The Kendall-Frost Reserve is a remnant wetland area in the far north end of Mission Bay. It is bisected by several tidal channels that flood the low lying habitat to varying levels as determined by tidal conditions.

SEASONAL and SPECIAL RESOURCE CONCERN

During April to September California least tern may be actively feeding in the bay. Nesting activity may occur near the Kendall-Frost Reserve.

RESOURCES OF PRIMARY CONCERN

California brown pelicans feed and rest in the bay year round. Belding's savannah sparrow and Light-footed clapper rail are present year round and will likely be nesting in the marsh vegetation during summer.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		County Sheriffs	(619) 565-5025
		Scripps Inst. Of Oceanography	(619) 534-3579
E/T		Univ. California San Diego	(619) 534-2077
C		CA Dept of Parks and Recreation	(909) 443-2969

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 47'37 Longitude W: 117 13'00"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The Kendall-Frost Reserve is flooded extensively during high tide series. At low tide a wide, soft mudflat extends a considerable distance from the marsh vegetation edge. The protection strategy takes advantage of the several shoal marker buoys deployed at the marsh perimeter.

Strategy 6-210.1 Objective:

Deploy harbor boom across the outboard side of the shoal marker buoys from the west to east end of the reserve.

Strategy 6-210.2 Objective:

Sandbag each tidal inlet to prevent entry of petroleum into the tidal channels.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No and kinds	staff deploy	Staff tend
6-210.1	2000				4		1	0				5	
6-210.2					0		0	0			10 shovels, 250 sandbags, sand	10	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

A boat launch ramp is located at Vacation Island and in the Dana basin.

LAND ACCESS: All access available

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

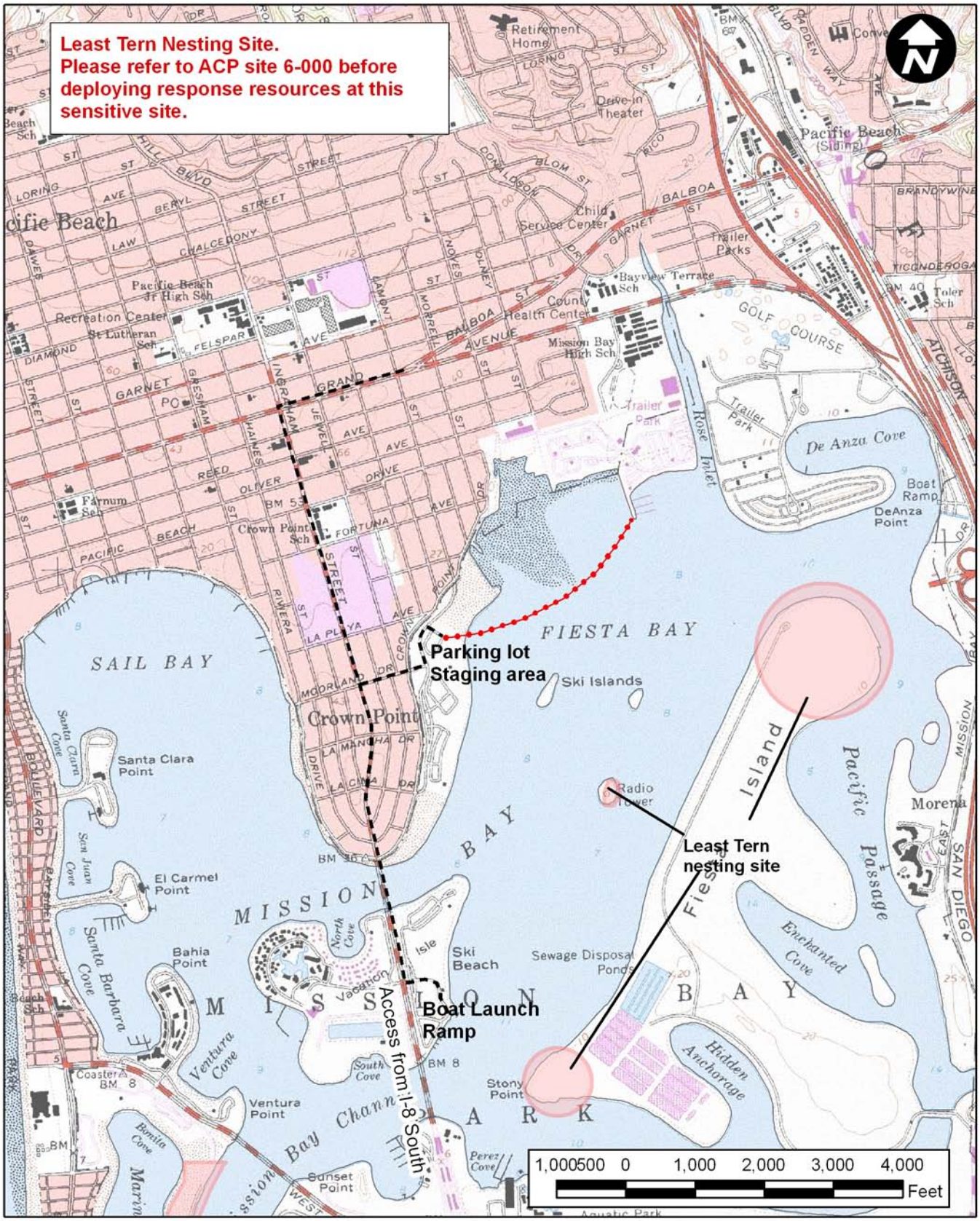
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

A large public parking lot is within 100 yards of the south end of Kendall-Frost reserve.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

This site is managed by UC San Diego. Contact Isabell Kay for access, (619) 534-2077.



CDFG-OSPR & USCG Site: 6-210-A Name: Kendall-Frost Reserve

Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Aug. 28, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- Point Loma

6-310 -B

Thomas Guide Location	Latitude N	Longitude W
	32 40'56"	117 14'54"

County: San Diego

USGS Quad: Point Loma

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

A small area of rock at the base of the bluff below the San Diego Waste Water Treatment facility where Harbor seals have selected to haul out. This site is remote and inaccessible.

SEASONAL and SPECIAL RESOURCE CONCERN

None identified

RESOURCES OF PRIMARY CONCERN

Harbor seals as adults and pups.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
B		National Marine Fisheries Service	(619) 557-5494
B		National Marine Fisheries Service	(619) 546-7181
B		Ca Dept. of Fish and Game	(619) 546-7170
C		CA Dept of Parks and Recreation	(909) 443-2969

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 40'56 Longitude W: 117 14'54"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:
Extremely rocky coastline which is continuously effected by strong wave action.

SITE STRATEGIES

This is an extremely rugged coastline which is continually effected by strong wave action. A thick kelp canopy is routinely present offshore from this site.

Strategy 6-310.1 Objective:

Deploy boom tow array boats offshore of this site to intercept arriving petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No and kinds	staff deploy	Staff tend
6-310.1	1500				0		4	0				8	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)
None practical

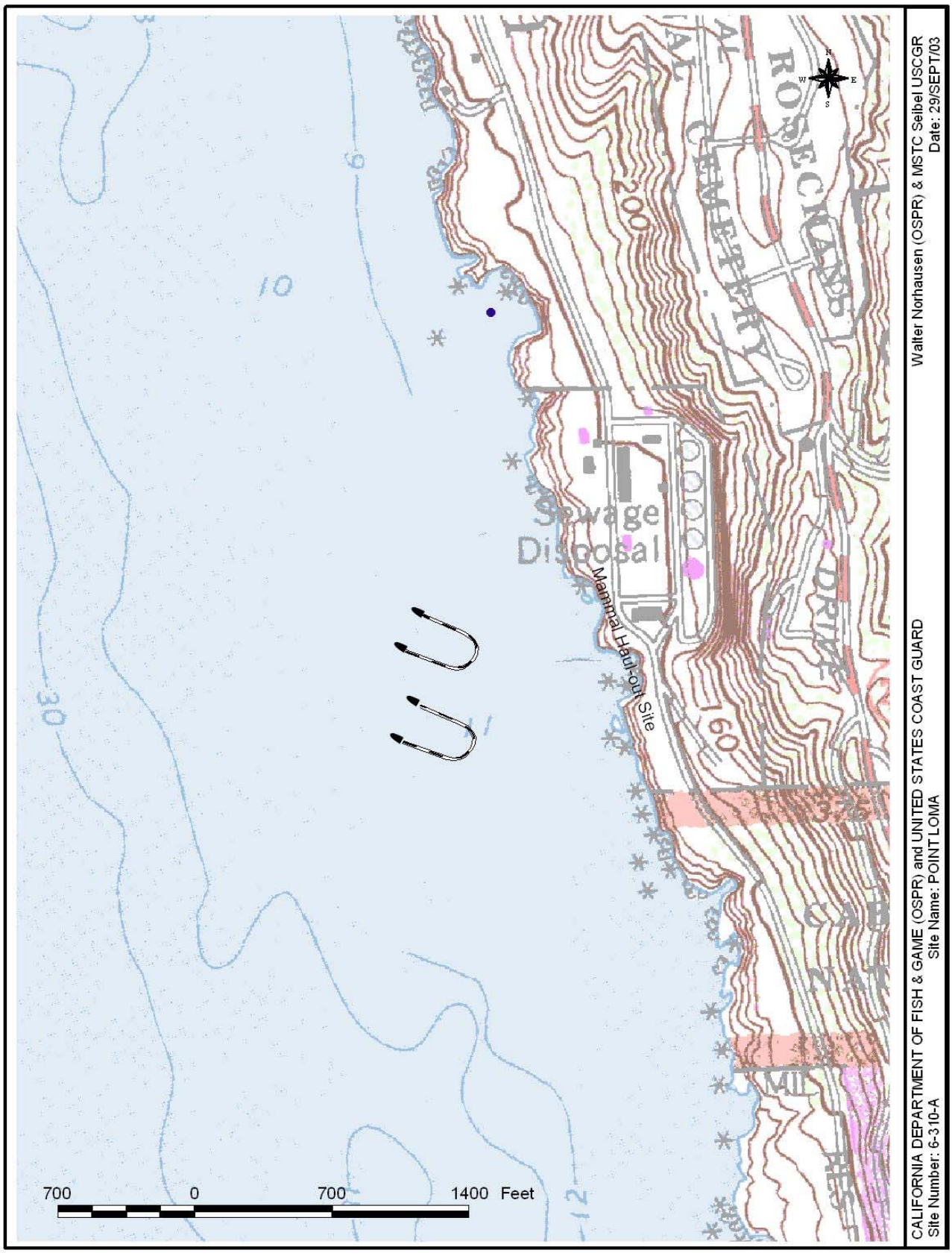
LAND ACCESS:

WATER LOGISTICS:
Limitations: depth, obstruction
Launching, Loading, Docking and Services Available: Boat access only.

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

6-400 -A Site Summary- Entrance San Diego Bay

6-400 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 40'00"	117 13'42"
USGS Quad:	Point Loma	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approximately 2000' wide at Ballast Point. The entrance to San Diego Bay is large and subject to tidal currents up to 2 knots. It supports a significant volume of vessel traffic. Numerous environmental and economical sensitive sites are located inside San Diego Bay. At the north end of the bay economic sites will dominate a response effort. Located near the entrance are three separate environmental sites that may be affected by free floating oil within minutes to hours with a flood tide. Two of those sites require only that the keepers of the marine mammals immediately be notified. Only one beach area is identified for exclusion boom deployment. Similarly, four marina entrances will need to be closed by deployment of exclusionary boom within a few hours.

SEASONAL and SPECIAL RESOURCE CONCERN

No specific seasonal concerns are identified that may limit, or preclude response efforts.

RESOURCES OF PRIMARY CONCERN

Entrance to San Diego Bay has numerous bird species. Calirornia least tern are found in the general area of the entrance to San Diego Bay. The Light-footed clapper rail is also known from several wetland marsh sites around the bay.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 1 – Notify South Coastal Information Center immediately.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		USN Natural Resource Specialist	(619) 532-3745
T		USN-Coronado Natural Resources Office	(619) 545-1130
		US Navy NRAD	(619) 553-1366
		San Diego Harbor Police Dispatch	(619) 686-6272
		San Diego Port District	(619) 686-6254
C		CA Dept of Parks and Recreation	(909) 443-2969
	Don Montoro NOSC Program Mgr	US Navy	(619) 556-3135

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 40'00 Longitude W: 117 13'42"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

waves & strong currents

SITE STRATEGIES

San Diego Bay entrance channel is a large deepwater port entrance which is oriented north-south. It supports a large volume of military, commercial, and recreational vessel traffic. The entrance channel will experience tidal current velocities of 2 knots ± depending on tidal conditions. Winds are generally westerly with accompanying southerly or northerly components. However, moderate to strong southerly, northerly, or easterly winds may occasionally develop and persist a day or more.

Strategy 6-400.1 Objective:

V – configuration radiating from the first outbound red channel marker buoy back toward Ballast Point on the west shore with attachment at the base of the Ballast Point pier piling (1,700 ft). This strategy may be improved by laying segments of boom in place of one string, which would add 500 ft. to the total length of boom needed. On the east shore the boom end will be anchored on the rip-rap armoring near the head of Zuniga jetty (1,500 ft). The boom will be linked at the channel buoy to prevent any gap. Oil will be deflected to the west and east shorelines for recovery by truck or vessel mounted skimmers.

Strategy 6-400.10 Objective:

Closure boom at the entrance of Harbor Island marina. 1,000 feet harbor boom.

Strategy 6-400.11 Objective:

Closure of the Naval Recruit Depot marina channel. 300 feet of harbor boom.
3 anchor systems.

Strategy 6-400.2 Objective:

Deflection boom beginning at Ballast Point and extending northeast to North Island.

Strategy 6-400.3 Objective:

Collection boom beginning at the jetty on North Island.

Strategy 6-400.4 Objective:

Deflection boom beginning at Scripps Institution of Oceanography's Marine Facilities Pier and extending to the channel marker buoy #16A.

Strategy 6-400.5 Objective:

Collection boom beginning at the jetty on North Island.

Strategy 6-400.6 Objective:

Deflection boom beginning at the public fishing pier on Shelter Island and extending to the channel marker buoy #18.

Strategy 6-400.7 Objective:

Collection boom beginning at the beach on North Island south of the boat launch and extending to the channel marker buoy #19.

Strategy 6-400.8 Objective:

Closure boom at the entrance of Shelter Island marina. 500 feet harbor boom.

Strategy 6-400.9 Objective:

Closure boom at the entrance of Commercial Basin. 1,000 feet harbor boom.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No and kinds	staff deploy	Staff tend
6-400.1	3700				12		4	0				8	
6-400.10	1000	0		0	4		1	0	0		0	4	
6-400.11	300	0		0	3		1	0	0		0	2	
6-400.2	2000				8	heavy anchor systems	4	0				6	
6-400.3	1500	0		0	3		1	0	0		0	2	
6-400.4	3000	0		0	5	heavy anchor systems	2	0	0		0	6	
6-400.5	1500	0		0	3		2	0	0		0	4	
6-400.6	3500	0		0	8	heavy anchor systems	2	0	0		0	4	

6-400.7	2500	0	0	4	1	0	0	0	4
6-400.8	500	0	0	3	1	0	0	0	4
6-400.9	1000	0	0	4	1	0	0	0	4

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

The San Diego Bay entrance protection strategy is achievable only by boat. Shoreline Approximately 2000' wide at Ballast Point.

LAND ACCESS: All access available.

WATER LOGISTICS:

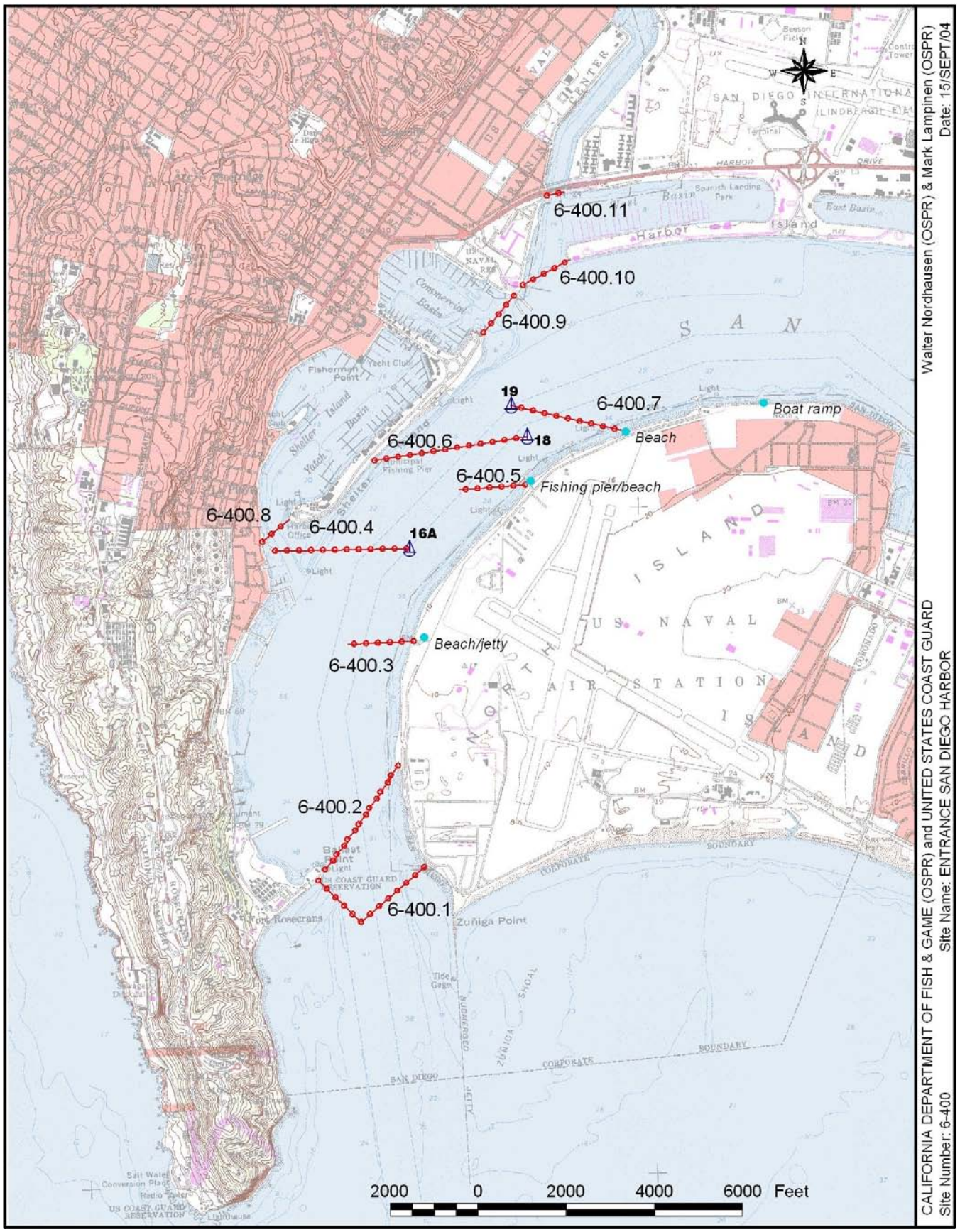
Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- USN Marine Mammals Research Center

6-410 -B

Thomas Guide Location	Latitude N	Longitude W
	32 41'52"	117 14'15"

County: San Diego

USGS Quad: Point Loma

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

The site is operated by the Navy to maintain a number of marine mammals used in various research programs. In the event of an oil release, these mammals may need protection. The keepers of the animals will determine the appropriate protection measures.

SEASONAL and SPECIAL RESOURCE CONCERN

None identified

RESOURCES OF PRIMARY CONCERN

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		US Navy Explosive Orinance Disposal	(619) 553-9901
		US Navy NRAD	(619) 553-1366
		CA Dept of Parks and Recreation	(909) 443-2969
	Don Montoro NOSC Program Mgr	US Navy	(619) 556-3135

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 41'52 Longitude W: 117 14'15"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The site is operated by the US Navy. Marine mammals are maintained for research projects at this facility. The animal caretakers will provide any response needs.

Strategy 6-410.1 Objective:

Immediately notify NRAD Duty Veterinarian.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special No	Special and	Equipment or comment kinds	staff deploy	Staff tend
6-410.1					0		0	0							

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Entry to the site should not be necessary. Oil that presents a potential hazard to these animals should be reported to Naval facility contacts listed below.

LAND ACCESS:

WATER LOGISTICS:

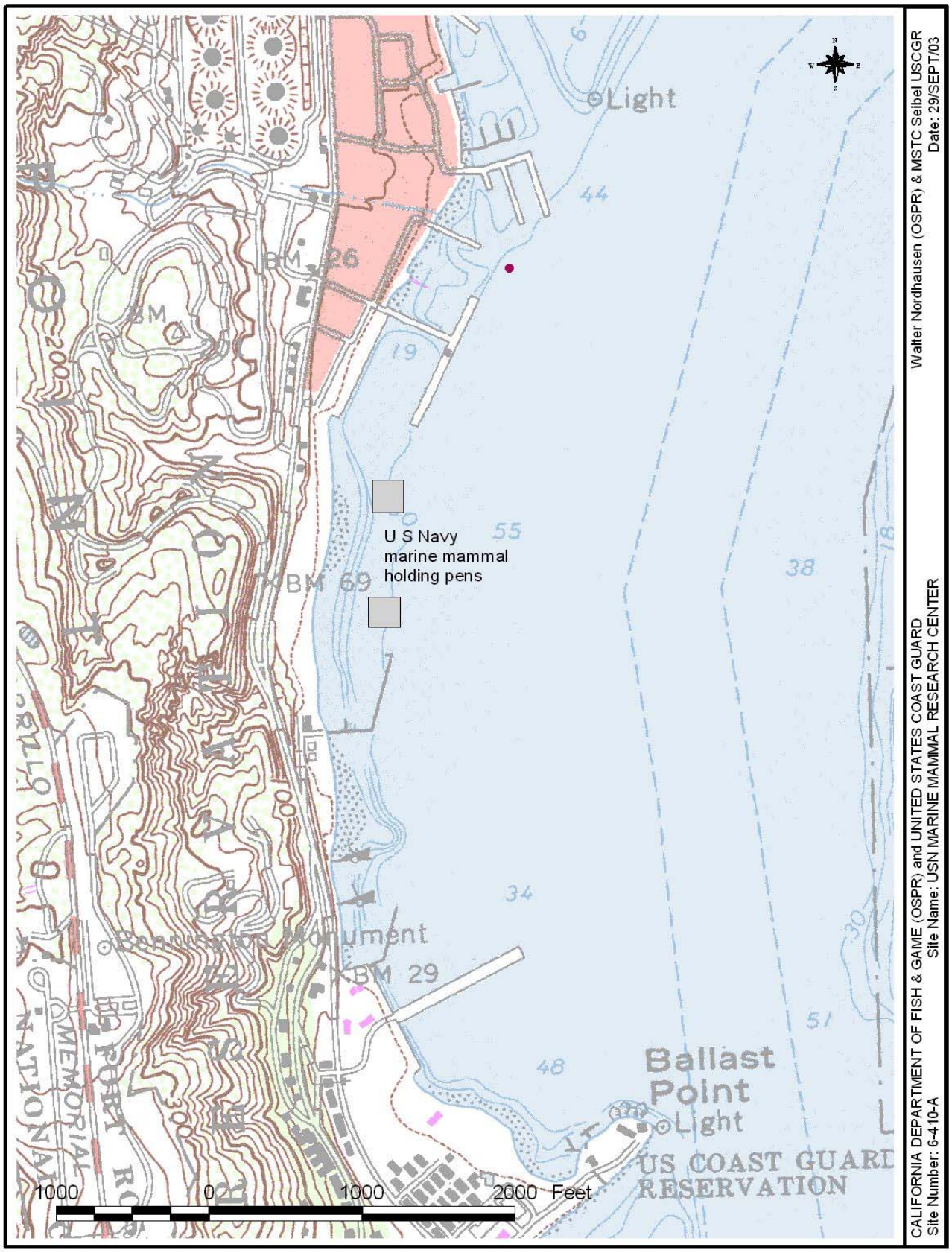
Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- Navy Magnetic Silencing Facility

6-415 -B

Thomas Guide Location	Latitude N	Longitude W
	32 44'00"	117 12'36"

County: San Diego

USGS Quad: Point Loma

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Approximately 1000' long. The site is a sandy beach approximately 1,500 feet long lying between the Magnetic Silencing facility pier and the FISC fuel facility. The beach and near shore area are heavily used by large numbers of swimming, diving and wading birds.

SEASONAL and SPECIAL RESOURCE CONCERN

None identified

RESOURCES OF PRIMARY CONCERN

Large numbers of wading and diving birds utilize this beach for feeding and resting.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 1 – Notify South Coastal Information Center immediately.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		USN Natural Resource Specialist	(619) 532-3745
		US Navy NRAD	(619) 553-1366
C		CA Dept of Parks and Recreation	(909) 443-2969
	Don Montoro NOSC Program Mgr	US Navy	(619) 556-3135

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 44'00 Longitude W: 117 12'36"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The site is a course grain sand beach about 1,500 feet long located between the Magnetic Silencing Facility pier and the FISC fuel depot. This area experiences only mild tidal currents. It is generally well protected from external forces.

Strategy 6-415.1 Objective:

Exclusion boom deployed parallel to the shoreline several yards from shore.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-415.1	1500				3		1	0					3	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

The site is reached by water from San Diego Bay near the Navy fuel pier. Approximately 1000' long.

LAND ACCESS: Military access

WATER LOGISTICS:

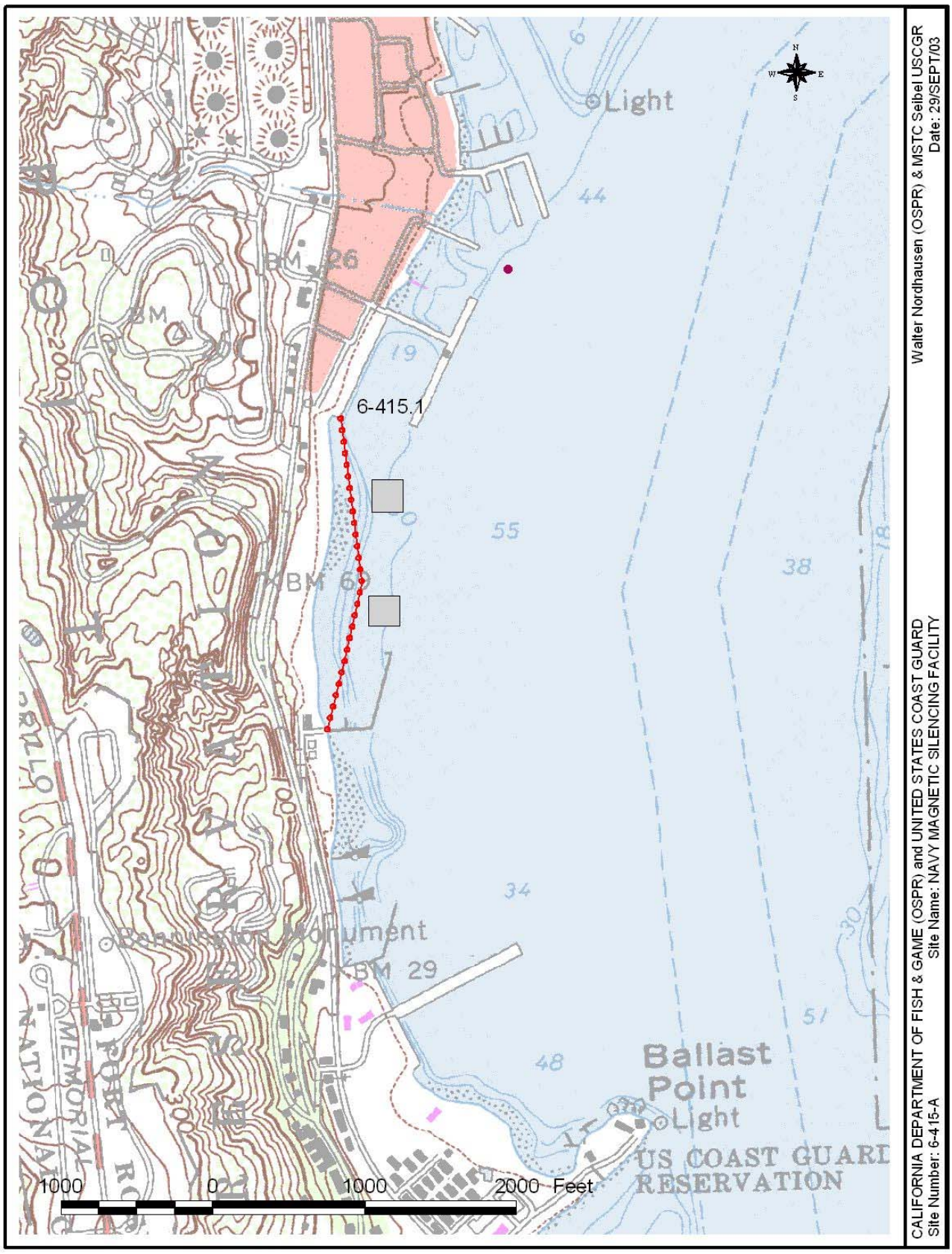
Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 40'00"	117 07'00"
USGS Quad:	Point Loma	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

The San Diego Bay Cross-Bay Booming Strategy is not a site specific protection strategy, but rather and generalized protection strategy for all of the south San Diego Bay environmentally sensitive sites. The purpose of the Cross-Bay deflection boom is to eliminate the need to deploy protection for each of the eight individual sites identified in the South Bay. Or, at least, to reduce the quantity of petroleum that might otherwise impact south bay sites. The deployment of deflection boom for this strategy can occur at any of several locations between the 32nd Street Naval Station, Pier 1 and the south end of 24th Street Terminal pier. Several deployments may be warranted to achieve the desired effect.

SEASONAL and SPECIAL RESOURCE CONCERN

None identified

RESOURCES OF PRIMARY CONCERN

The entire south end of San Diego Bay is at risk of free floating petroleum. Numerous species of birds, fishes, invertebrates, and several mammals, along with green sea turtles, and submerged vegetation and acres of mudflat are threatened year round if the movement of floating product can not be checked farther north.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: Not Applicable.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 40'00 Longitude W: 117 07'00"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The Cross-Bay Deflection Boom strategy was developed from the recognition that protecting each of several individual sites in the south bay would require a tremendous amount of response equipment to be delivered into relatively remote locations, sometimes with very shallow water conditions, within a very short time frame. The intent of the Cross-Bay Deflection Boom strategy is to halt or impede the southward progression of oil when released in a location north of the 24th Street Terminal. This strategy takes advantage of the facts that wind and current conditions usually force floating oil to stay close to the eastern side of the bay. Several convenient man-made embayments can be utilized to contain and recover free product.

Strategy 6-420.1 Objective:

Utilizing the most appropriate pier end between Naval Station 32nd Street and the south end of 24th Street Terminal, deploy 2,000 feet of harbor boom toward the northwest. Secure one boom end to any appropriate pier end, and anchor the mid-channel boom end. More than one site may be utilized, as deemed necessary and appropriate.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-420.1	2000	0		0	8		2	0	0		0		4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

All pier ends are accessible by boat.

LAND ACCESS:

WATER LOGISTICS:

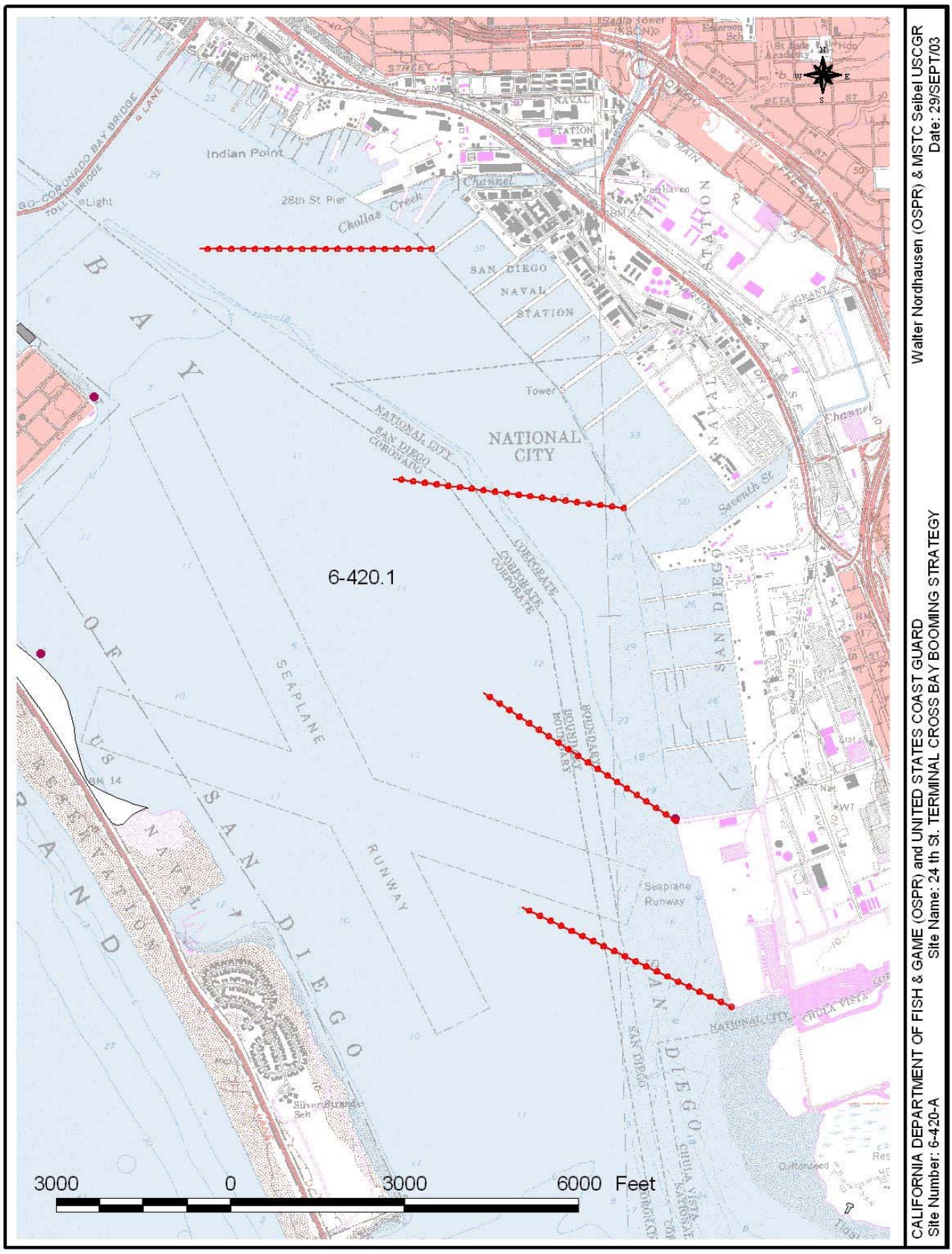
Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- US Navy Amphibious Base

6-425 -B

Thomas Guide Location	Latitude N	Longitude W
	32 40'40"	117 09'12"

County: San Diego

USGS Quad: Point Loma

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

The Navy Amphibious Base may maintain a collection of marine mammals at a holding facility influenced by waters of San Diego Bay. In the event of an oil release those mammals may need protection. The keepers of the animals will determine what that action will be.

SEASONAL and SPECIAL RESOURCE CONCERN

None identified

RESOURCES OF PRIMARY CONCERN

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		USN Amphibious Base Security	(619) 437-3432
		USN EOD Quarterdeck	(619) 437-2906
		USN Oridance Disposal	(619) 437-2173
C		CA Dept of Parks and Recreation	(909) 443-2969
	Don Montoro NOSC Program Mgr	US Navy	(619) 556-3135

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 40'40 Longitude W: 117 09'12"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The site is operated by the US Navy. Marine mammals are maintained for research projects at this facility. The animal caretakers will provide any response needs.

Strategy 6-425.1 Objective:

Immediately notify NRAD Duty Veterinarian.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	and kinds	staff deploy	Staff tend
6-425.1					0		0	0						

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Entry to the site should not be necessary. Oil that may present a hazard to these animals should be reported to Naval facility contacts listed below.

LAND ACCESS:

WATER LOGISTICS:

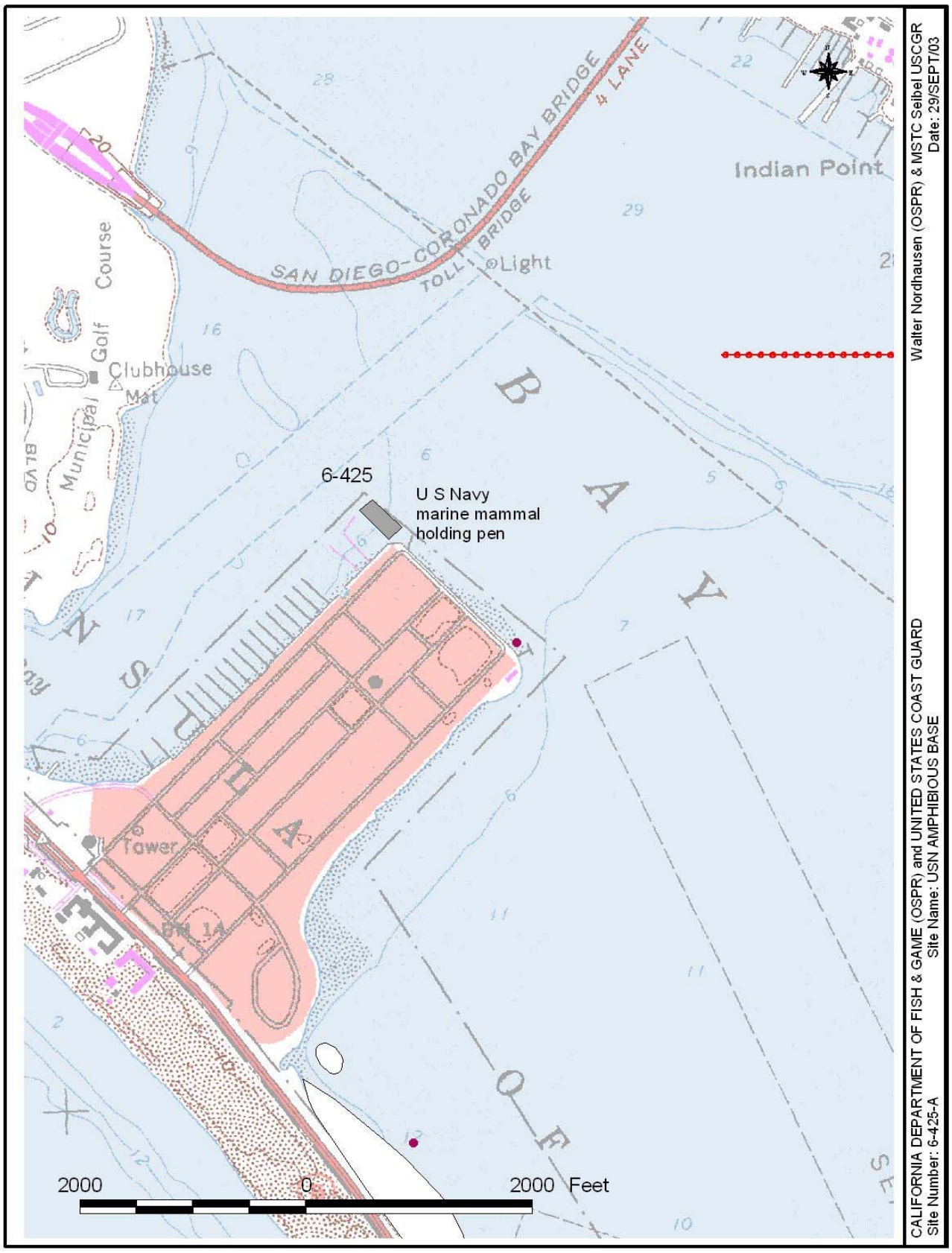
Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- USN Delta Beach

6-430 -A

Thomas Guide Location	Latitude N	Longitude W
	32 39'56"	117 09'24"

County: San Diego

USGS Quad: Point Loma

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

The Delta Beach site is a California least tern seasonal nesting area. It is an elevated shoreline of medium and fine grain sand dredge spoils. Any response effort that may require shoreline access onto this site must be approved by US Fish and Wildlife Service and/or the Navy Environmental Resources office.

SEASONAL and SPECIAL RESOURCE CONCERN

During April to September California least terns (federal and state Endangered listing) are likely to be nesting at this site. Adult birds will likely be feeding in the bay. Chicks may be present on the shoreline.

RESOURCES OF PRIMARY CONCERN

PRIORITY: A – During California lest tern summer breeding season (April to September)
C – During non-breeding season

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		US Fish and Wildlife Service (24 hour)	(760) 271-6934
		Amphibious Base Natural Resources Office	(619) 437-3840
		Amphibious Base Natural Resources Office	(619) 437-3846
		USN Amphibious Base Security	(619) 437-3432
		USN Natural Resource Specialist	(619) 532-3745
C		CA Dept of Parks and Recreation	(909) 443-2969
	Don Montoro NOSC Program Mgr	US Navy	(619) 556-3135

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 39'56 Longitude W: 117 09'24"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The intent of the protection strategy for this site is to prevent oil from contacting the sand beach shoreline. Two levels of response strategy are developed.

Strategy 6-430.1 Objective:

Cross-bay deflection boom (see: 06-420.1)

Strategy 6-430.2 Objective:

Deploy exclusion boom 300 too 600 feet offshore of the beach face from north to south, parallel to shore.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-430.1					0		0	0						
6-430.2	1500				6	light anchor systems	2	0					6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Land access is available from Silver Strand Highway. The area is secured by fencing and a locked gate.

LAND ACCESS:

WATER LOGISTICS:

Limitations: depth, obstruction

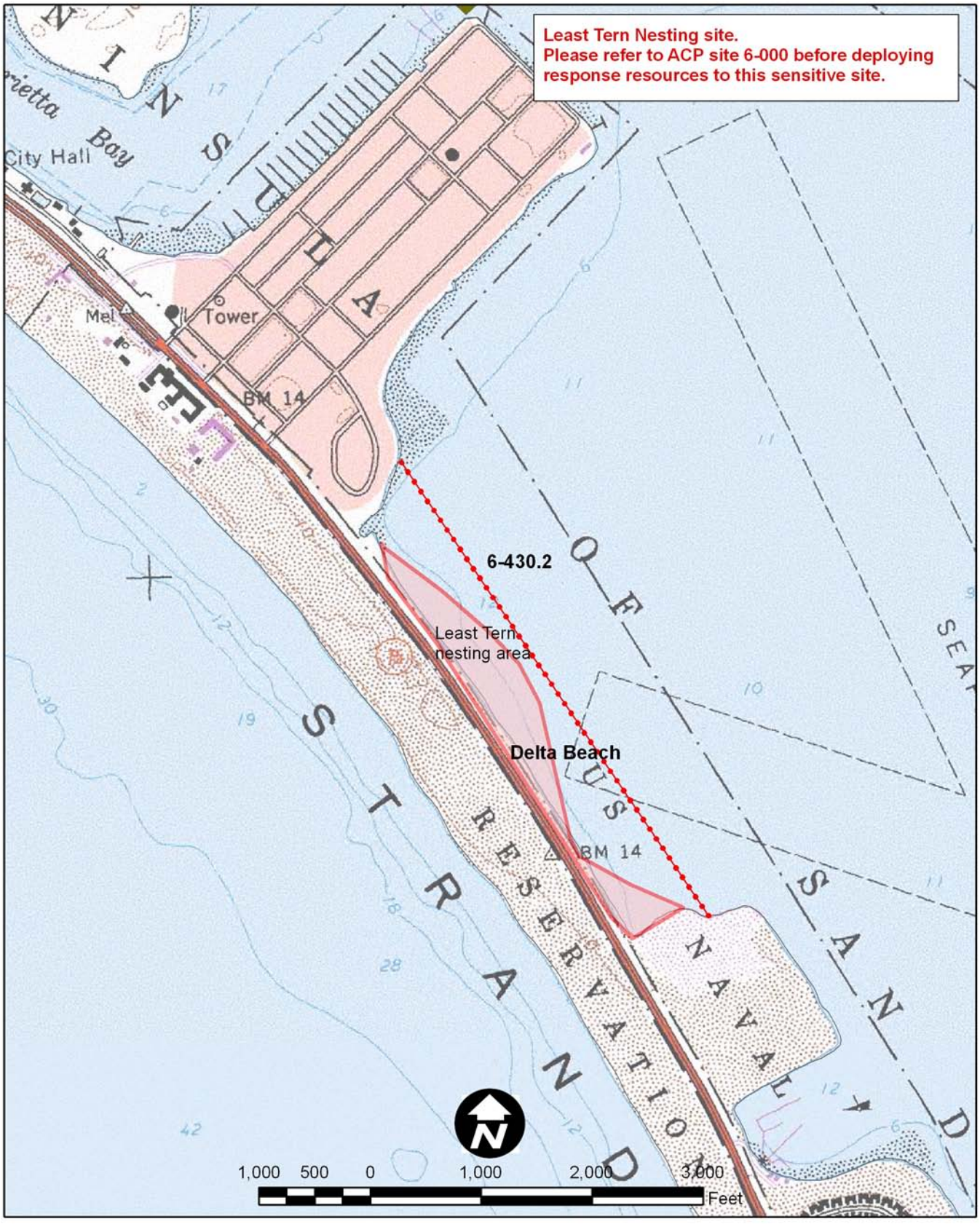
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

This site is in a fenced and gated area accessible from Silver Strand Blvd. Contact Navy Amphibious Base Security for site entry.



CDFG-OSPR & USCG Site: 6-430 Name: USN Delta Beach

Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Aug. 28, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Thomas Guide Location	Latitude N	Longitude W
	32 39'00"	117 06'30"

County: San Diego

USGS Quad: Imperial Beach

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

California least tern and Western snowy plover may be nesting at the D Street fill area directly across the Sweetwater channel from L.M. Pepper park from April to September. These birds may be feeding in the Sweetwater channel and San Diego Bay water areas

SEASONAL and SPECIAL RESOURCE CONCERN

Feeding Least Terns and Snowy Plover during spring and summer. Nesting Belding's Savannah Sparrows nesting during spring and summer.

RESOURCES OF PRIMARY CONCERN

Marsh habitat with associate bird, fish and wildlife. Saltmarsh birds beak present in this area.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		US Fish and Wildlife Service (24 hour)	(760) 271-6934
		CA Dept of Parks and Recreation	(909) 443-2969
		San Diego County Parks and Recreation	(619) 525-8222

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 39'00 Longitude W: 117 06'30"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The protection strategy for Paradise Marsh is intended to be located on the Sweetwater Channel west of the marsh flood channels. This site protection is combined with the protection strategy for the Sweetwater National Wildlife Refuge.

Strategy 6-435.1 Objective:

Cross-bay Deflection Boom Strategy 06-420.1

Strategy 6-435.2 Objective:

This strategy begins at the L.M. Pepper park boat launch ramp and across to the south side of Sweetwater Channel. Protection strategy 440.2 is a direct continuation of this strategy (435.2)

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-435.1					0		0	0						
6-435.2		500			2		2	0					6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Land-side access to this site is best achieved via the L.M. Pepper park parking lot. A walking trail is available along the Sweetwater channel levee. To reach L.M. Pepper park exit Interstate-5 at Auto Mall Drive west. Turn left into Tidewater Ave. The park is about 1 mile south. L.M Pepper park is a relatively large parking lot with a boat launch ramp. It will accommodate a substantial mount of equipment.

LAND ACCESS: D Street Fill access limited April-Sept.

WATER LOGISTICS:

Limitations: depth, obstruction

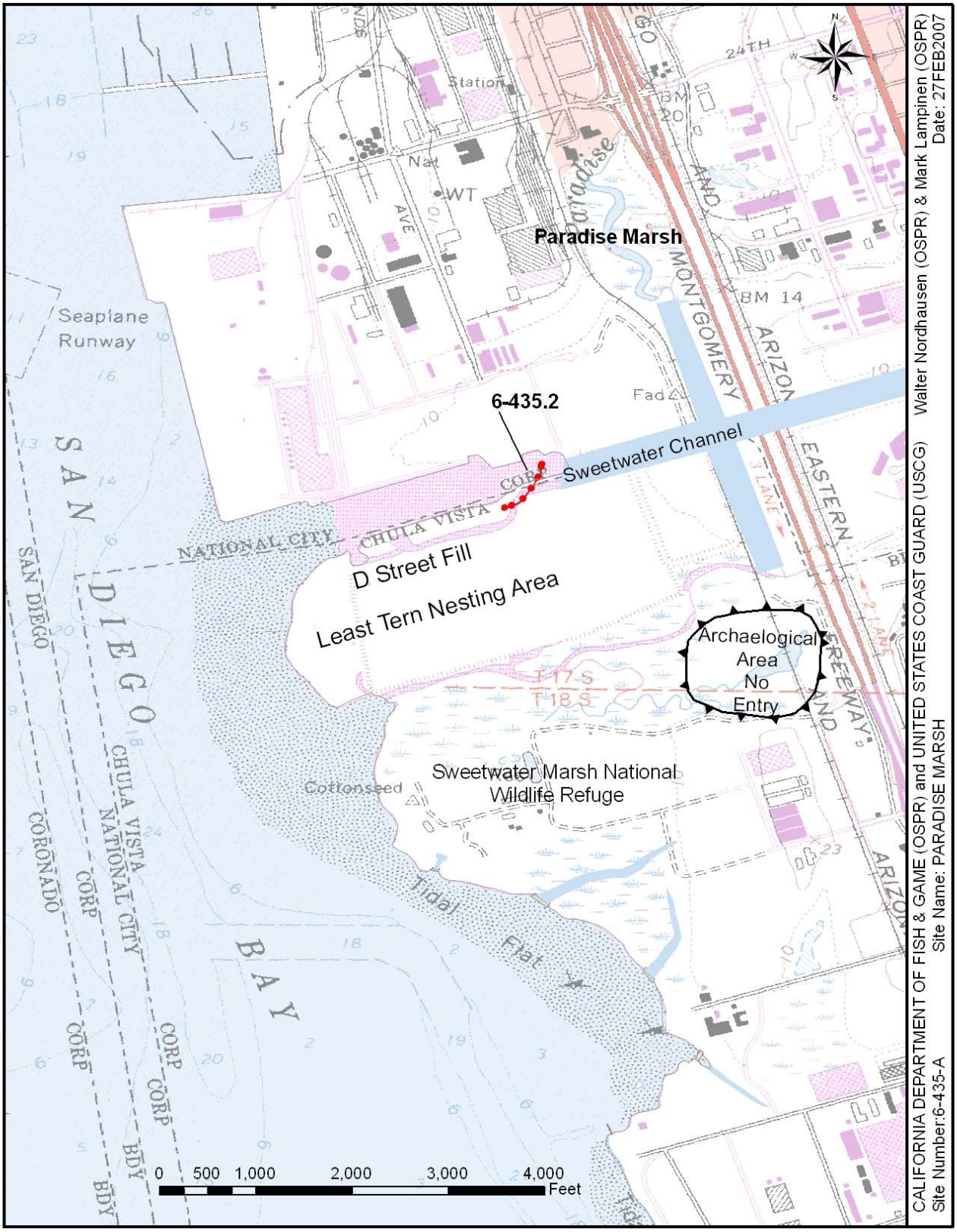
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Pepper Park boat launch parking lot at the terminal end of Tidelands Ave, National City.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- Sweetwater Marsh National Wildlife Refuge

6-440 -A

Thomas Guide Location	Latitude N	Longitude W
	32 38'30"	117 06'30"

County: San Diego

USGS Quad: National City

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Sweetwater River National Wildlife Refuge is owned by the U.S. Fish and Wildlife Service. It is a large marsh area with extensive vegetated habitat influenced by intertidal flooding conditions. It forms an expansive habitat in south San Diego Bay that provides food and shelter to a large number of wildlife resources. Several Threatened or Endangered species are seasonal, or year-round residents.

SEASONAL and SPECIAL RESOURCE CONCERN

California least terns have been using the nearby D Street fill as a summer nesting area for several years, and may be present between April and September. California least terns utilize the San Diego Bay waters as a feeding area.

RESOURCES OF PRIMARY CONCERN

California brown pelicans feed and rest in the bay year round. Light-footed clapper rail and Belding's savannah sparrow are year-round residents of the marsh, and extremely vulnerable to oiling of the intertidal marsh habitat.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 2 – Notify South Coastal Information Center within 24 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
		National Marine Fisheries Service	(562) 980-4043
		Coastal and Marine Institute	(619) 594-7723
		USFWS	(619) 431-9440
		US Fish and Wildlife Service (24 hour)	(760) 271-6934
		Bayfront Conservancy	(619) 432-2483
		Bayfront Conservancy	(619) 422-8100
		San Diego Port District	(619) 686-6254
		CA Dept of Parks and Recreation	(909) 443-2969

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 38'30 Longitude W: 117 06'30"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The Sweetwater National Wildlife Refuge protection strategy is combined with the Paradise Marsh protection strategy. The Sweetwater National Wildlife Refuge is a complex site to protect. It is a large wetland with several tidal flood channels. The bay-side face of the refuge is a broad mudflat which will severely restrict the ability of responders to approach the site. Very low tide cycles will be especially troublesome.

The protection strategies for all of the south bay sites are two or three level responses. All sites rely first on the ability to capture oil at or above the 24th Street Terminal. Secondary strategies are put into motion when it becomes apparent that the primary strategy is likely to be inadequate.

Strategy 6-440.1 Objective: Prevent an off site oil spill from arriving at this site by booming and collecting oil at other locations in the bay.

Cross-bay Deflection Boom strategy 06-420.1

Strategy 6-440.2 Objective:

This strategy is the continuation of strategy 435.2. It begins where 435.2 ends and extends westward through Sweetwater Channel rounding the outer channel marker, keeping to the east side of the south bay navigation channel. From there it turns southward toward the south bay along the channel markers. At channel marker 7 the boom will turn eastward and continue to channel marker 9, leaving the channel open to vessel traffic. The channel markers themselves provide the anchoring system for much of the boom length. Only in Sweetwater Channel will anchoring systems be provided by the responder.

Strategy 6-440.3 Objective: When a full boom closure of the channel is necessary to prevent oiling of the marsh

After depolying Strategy 6-440.2, continue the boom from channel marker 9 toward the northwest corner of the South Bay Boat Yard leaving the channel clear for vessel traffic.

Strategy 6-440.4 Objective:

A third level of protection at this site relies on the use of intertidal boom at the historic Sweetwater River mouth (south edge of D Street fill)

Strategy 6-440.5 Objective:

Sandbags placed in the several tidal flood channels. Four such channels are located around the perimeter of the wetland from a promontory on the north end of the wetland to the far south end of the refuge at the F Street road culvert. Each inlet will require at least 100 sandbags to close the respective tidal inlet.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-440.1					0		0	0						
6-440.2	6500				14	light anchor systems	2	0					6	
6-440.3	2000	0		0	4		0	0	0		0			
6-440.4	0	0	200	interti 0	0		0	0	0		0			
6-440.5	0	0		0	0		0	0	0		0	20 shovels, 500 sandbags, sand	20	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Sweetwater River Wildlife Refuge can be entered from E Street off I-5. A gate code is necessary at the gated entry (see contacts below). Shore-side entry to the marsh beach face is possible from the parking lot using two available trails. Parking is limited inside the refuge. All cleanup crews need permission to enter, and direction to access trails. Issues regarding listed species must be addressed before any shore-side cleanup activity will begin. If it is necessary to close intertidal flood channels with sandbags, or clean the beaches, these trails will be needed.

LAND ACCESS: Truck/auto from D St. or E St. Interpretive Center gate or foot

WATER LOGISTICS: Not possible during low tide, only marginal at high tide

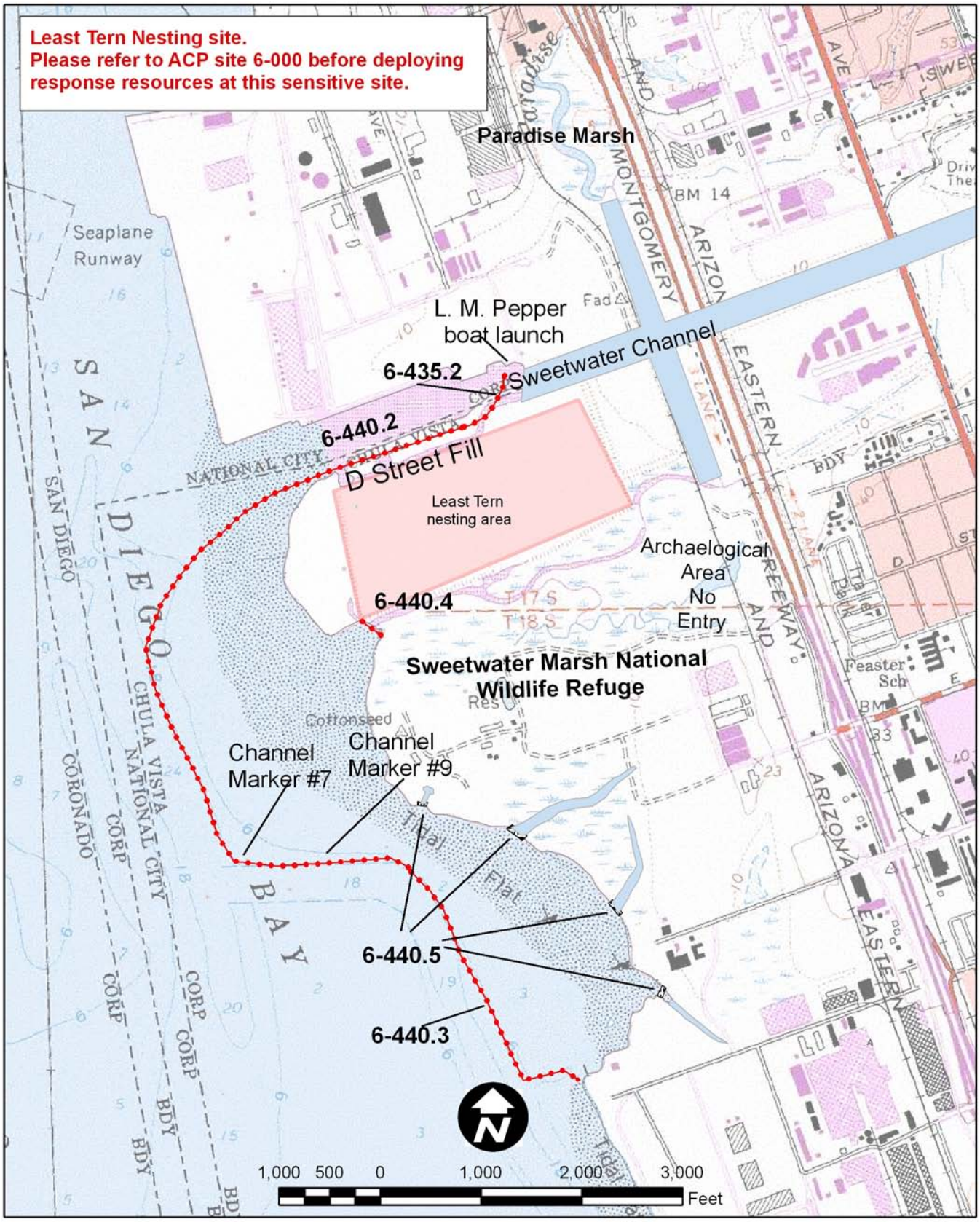
Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:
Staging of sand bags and sand can occur on the Sweetwater Marsh Refuge, but should be coordinated with Refuge personnel to avoid injury to Refuge property and resources.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



CDFG-OSPR & USCG Site: 6-440 Name: Sweetwater River National Wildlife Refuge Robin Lewis (OSPR) & Jo Sanders (OSPR) Date: Sept. 3, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

6-445 -B Site Summary- J Street Marsh

6-445 -B

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 36'25"	117 07'29"
USGS Quad:	Imperial Beach	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

J Street marsh is a relatively small, low-lying tidal marsh situated at the foot of J Street, Chula Vista. Its northern edge is formed by the Chula Vista marina. The site can be fully flooded by tide levels greater than +5 feet.

SEASONAL and SPECIAL RESOURCE CONCERN

None identified

RESOURCES OF PRIMARY CONCERN

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 - Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 36'25 Longitude W: 117 07'29"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The J-Street Marsh is situated immediately south of the Chula Vista Marina and north of the Chula Vista Wildlife Preserve. The Marsh and Preserve are simultaneously protected by this strategy. The south end of San Diego Bay experiences little tidal current effect - except at this area the South Bay Power Plant uses a dredged channel as a path way for power plant cooling water. The channel is in proximity to this protection strategy. The south bay can be substantially influenced by winds.

The protection of all south bay sites are two or three level responses. All sites rely first on the ability to capture oil at, or above, the 24th Street Terminal. Secondary strategies are put into motion when it becomes apparent that the primary strategy is likely to be inadequate.

Strategy 6-445.1 Objective: Prevent an off site oil spill from arriving at this site by booming and collecting oil at other locations in the bay.

Cross-Bay Deflection Boom strategy 06-420.1

Strategy 6-445.2 Objective:

06-445.2 and 450.2: Deploy harbor boom from the south corner of the Chula Vista Marina seawall southward toward the northwest corner of the Chula Vista Wildlife Reserve. A 200 foot segment should be extended to the west from the CV Wildlife Reserve corner to serve as a containment area to allow recovery of deflected oil. Vacuum trucks can be staged at this corner for recovery operations.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special No	Special and kinds	Equipment or comment	staff deploy	Staff tend
6-445.1	0	0		0	0		0	0	0	0					
6-445.2		2000		0	4	light anchor systems	2	0	0	0				6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

The site can be accessed from the street near the storm water discharge channel at J Street. Attempt to approach this site from the water should be with great caution due to the shallow water level at its edge. Only very shallow draft vessels should approach.

LAND ACCESS:

WATER LOGISTICS:

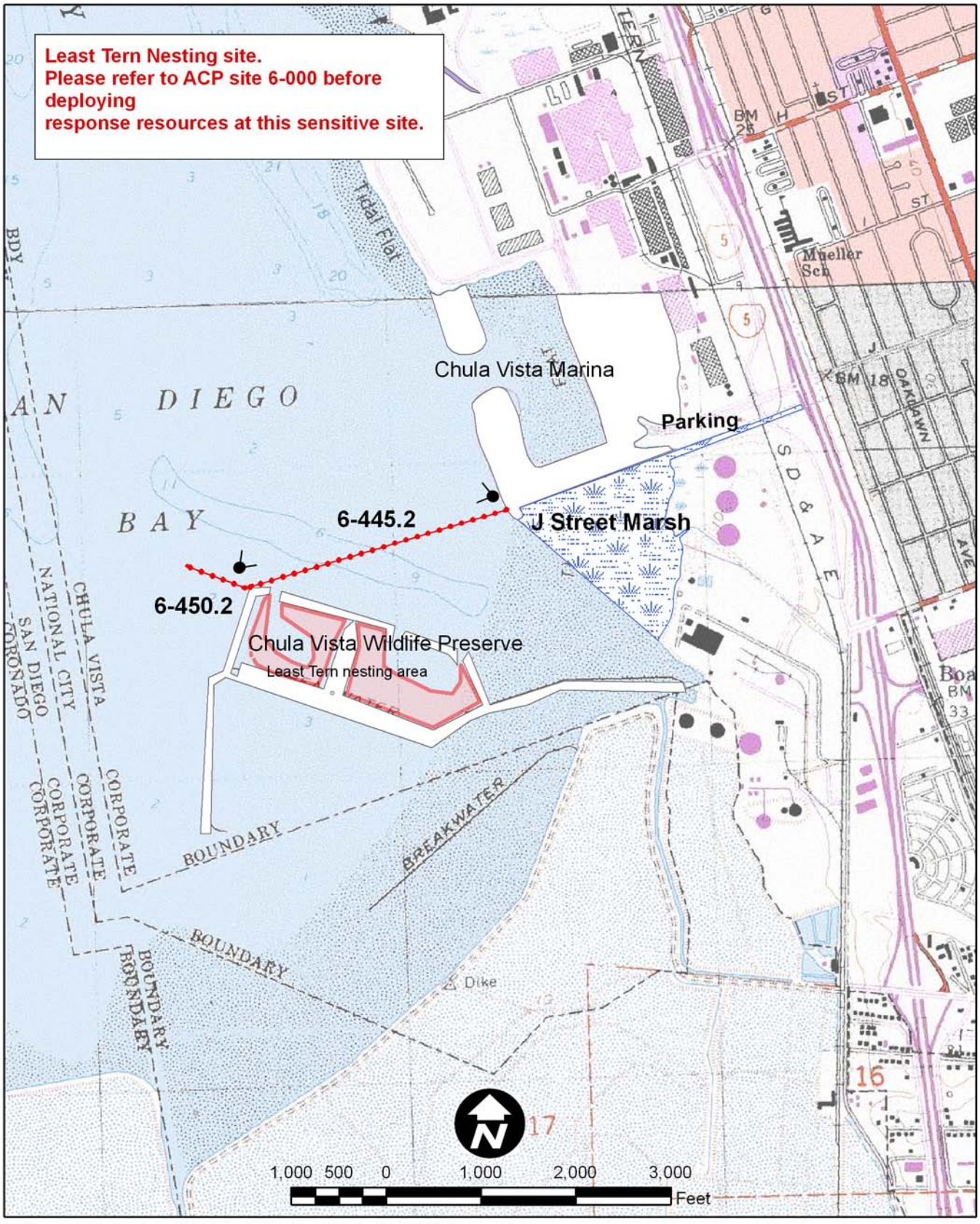
Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



CDFG-OSPR & USCG Site: 6-445 Name: J Street Marsh / Chula Vista Wildlife Reserve Island

Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Aug. 28, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

6-450 -A Site Summary- Chula Vista Wildlife Reserve Island

6-450 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 36'30"	117 07'30"
USGS Quad:	Imperial Beach	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

The Chula Vista Wildlife Reserve Island is a manmade feature designed to provide wetland habitat for marsh inhabiting species, and elevated habitat for California least tern nesting. The site is actually a peninsula connected to the mainland at the South Bay Power Plant property, and accessible from land only through that facility. The “island” is owned by the San Diego Port Authority, and entry must be approved by them and cleared by the power plant managers. Protection of the site is primarily directed toward exclusion of oil from the two small embayments that form the wetland habitat. The marshes are open to tidal exchange by three narrow tidal channels all located on the north side of the island.

SEASONAL and SPECIAL RESOURCE CONCERN

Between April and September California least terns and Western snowy plovers may be nesting on the island. Confirm approval for access with the San Diego Port Authority and US Fish and Wildlife Service.

RESOURCES OF PRIMARY CONCERN

Numerous species of birds, invertebrates, and wetland vegetation occur here both seasonally and year-round. California brown pelican are expected to be present year-round. Green sea turtles are a common occurrence in the power plant cooling water discharge channel. They are a federally listed species. They are attracted to the year-round warm water discharge and known to hibernate in the channel during winter months. Their activity increases during summer months. As an air breathing animal, they are very likely to be found near the water surface, and they are very susceptible to injury from boat propellers.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
		US Fish and Wildlife Service (24 hour)	(760) 271-6934
		National Marine Fisheries Service	(562) 980-4043
		Coastal and Marine Institute	(619) 594-7723
		CA Dept of Parks and Recreation	(909) 443-2969
		Duke Energy	(619) 409-7000

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location	NOAA CHART	Latitude N	Longitude W
San Diego		32 36'30	117 07'30"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The Chula Vista Wildlife Reserve Island (actually a peninsula) is a manmade structure that serves as a wetland and bird refuge habitat. The primary points of protection need are the two small wetland habitat embayments with tidal flood channels on the north side of the island. This site is combined with the J-Street marsh for site protection effort. The south end of the San Diego Bay experiences little tidal current effect - except at this area the South Bay Power Plant uses a dredged channel as a path way for power plant cooling water. The channel is in proximity to this protection strategy. The south bay can be substantially influenced by winds.

The protection of all south bay sites are two or three level responses. All sites rely first on the ability to capture oil at, or above, the 24th Street Terminal. Secondary strategies are put into motion when it becomes apparent that the primary strategy is likely to be inadequate.

Strategy 6-450.1 Objective: Prevent an off site oil spill from arriving at this site by booming and collecting oil at other locations in the bay.

Cross-Bay Deflection Boom strategy 06-420.1

Strategy 6-450.2 Objective:

06-445.2 and 450.2: Deploy harbor boom from the south corner of the Chula Vista Marina seawall southward toward the northwest corner of the Chula Vista Wildlife Reserve. A 200 foot segment should be extended to the west from the CV Wildlife Reserve corner to serve as a containment area to allow recovery of deflected oil. Vacuum trucks can be staged at this corner for recovery operations.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No and kinds	staff deploy	Staff tend
6-450.1					0		0	0					
6-450.2	4000				4	light anchor systems	2	0				4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Exit Interstate-5 at the L Street off ramp. Turn left at the stop sign a drive about ¼ mile to the South Bay Power Plant entry gate. The “island” is accessible by road. Response equipment and personnel can be delivered to any needed location on the island, provided nesting bird issues do not preclude access.

LAND ACCESS: All land access possible

WATER LOGISTICS: Not possible in low tide, only shallow draft vessels in high

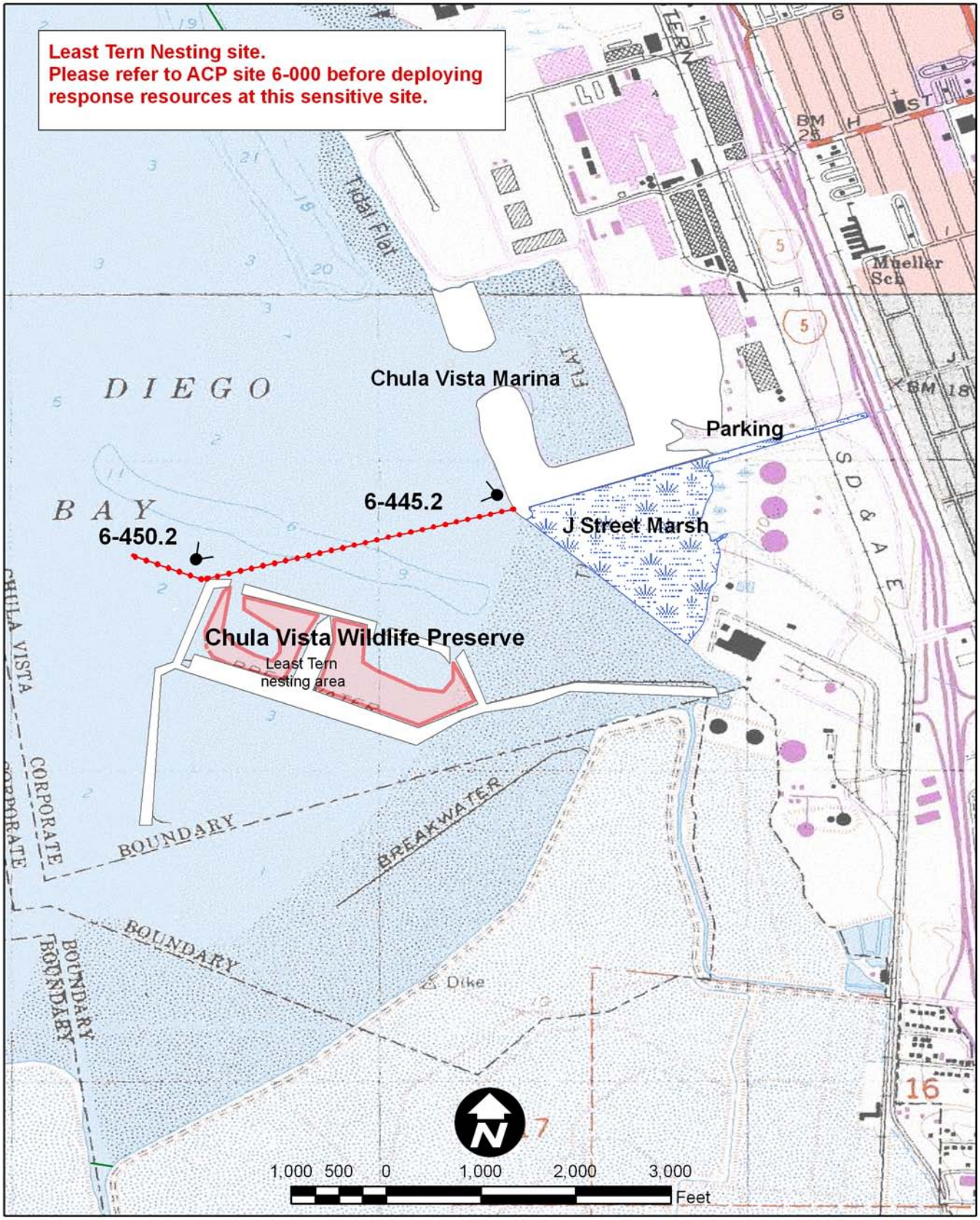
Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



CDFG-OSPR & USCG Site: 6-450-A Name: J Street Marsh / Chula Vista Wildlife Reseerve Island Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Aug. 28, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- South Bay NWR & Otay River Channel

6-455 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 36'30"	117 07'30"
USGS Quad:	Imperial Beach	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

The South Bay National Wildlife Refuge was previously known as the South Bay Salt Works. The salt production ponds are still active, but eventually will be deactivated. The Otay River channel bi-sects the refuge. The refuge ponds are segregated from the south bay water surface and the river channel by a levee system with tidal control gates. The river mouth is vulnerable to oil by natural tidal cycles. In the event of a potential threat to these areas, the refuge can be quickly protected by closure of the tide gates. The river mouth can only be protected by deployment of exclusion boom.

SEASONAL and SPECIAL RESOURCE CONCERN

Western snowy plovers may utilize a number of potential areas within the salt works shoreline and the river channel during summer nesting activity (April to September). Surface waters of San Diego Bay and the National Wildlife Refuge (salt works) may be used seasonally, and extensively, by a large number of marine birds and water fowl.

RESOURCES OF PRIMARY CONCERN

California brown pelicans feed and rest in the bay year round. Light-footed clapper rail and Belding's savannah sparrow are year-round residents of the marsh, and extremely vulnerable to oiling of the intertidal marsh habitat.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 3 – Notify South Coastal Information Center within 48 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		US Fish and Wildlife Service (24 hour)	(760) 271-6934
		US Fish and Wildlife Service (Carlsbad office)	(760) 431-9440
		CA Dept of Parks and Recreation	(909) 443-2969
		South Bay Salt Company	(619) 423-3388

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location
San Diego

NOAA CHART

Latitude N 32 36'30 Longitude W 117 07'30"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The South Bay National Wildlife Refuge and Otay River are closely integrated. The Refuge was previously known at the South Bay Salt Works, but was designated as wildlife refuge in 2000. The Refuge water is controlled by a series of flood gates. Protection of this area is achieved by closure of flood gates, as necessary. The Otay River mouth is situated in the southwest corner of San Diego Bay. Protection of this site may require the placement of harbor boom across the river channel.

The protection of all south bay sites are two or three level responses. All sites rely first on the ability to capture oil at, or above, the 24th Street Terminal. Secondary strategies are put into motion when it becomes apparent that the primary strategy is likely to be inadequate.

Strategy 6-455.1 Objective: Prevent an off site oil spill from arriving at this site by booming and collecting oil at other locations in the bay.

Cross Bay Deflection boom strategy see 06-420.1

Strategy 6-455.2 Objective:

Otay River mouth closure

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-455.1					0		0	0						
6-455.2	200				4		0	1					4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

The river mouth can be approached by boat and river levee. The south bay water is quite shallow in this region. During very low tidal cycles this area becomes a vast mud flat. Even during high tidal cycles, only shallow draft boats should approach this area. The river levee is a good alternative protective boom deployment option, but several locked gates will be encountered, and teams of responders will need to be sent to both sides of the river to secure the site.

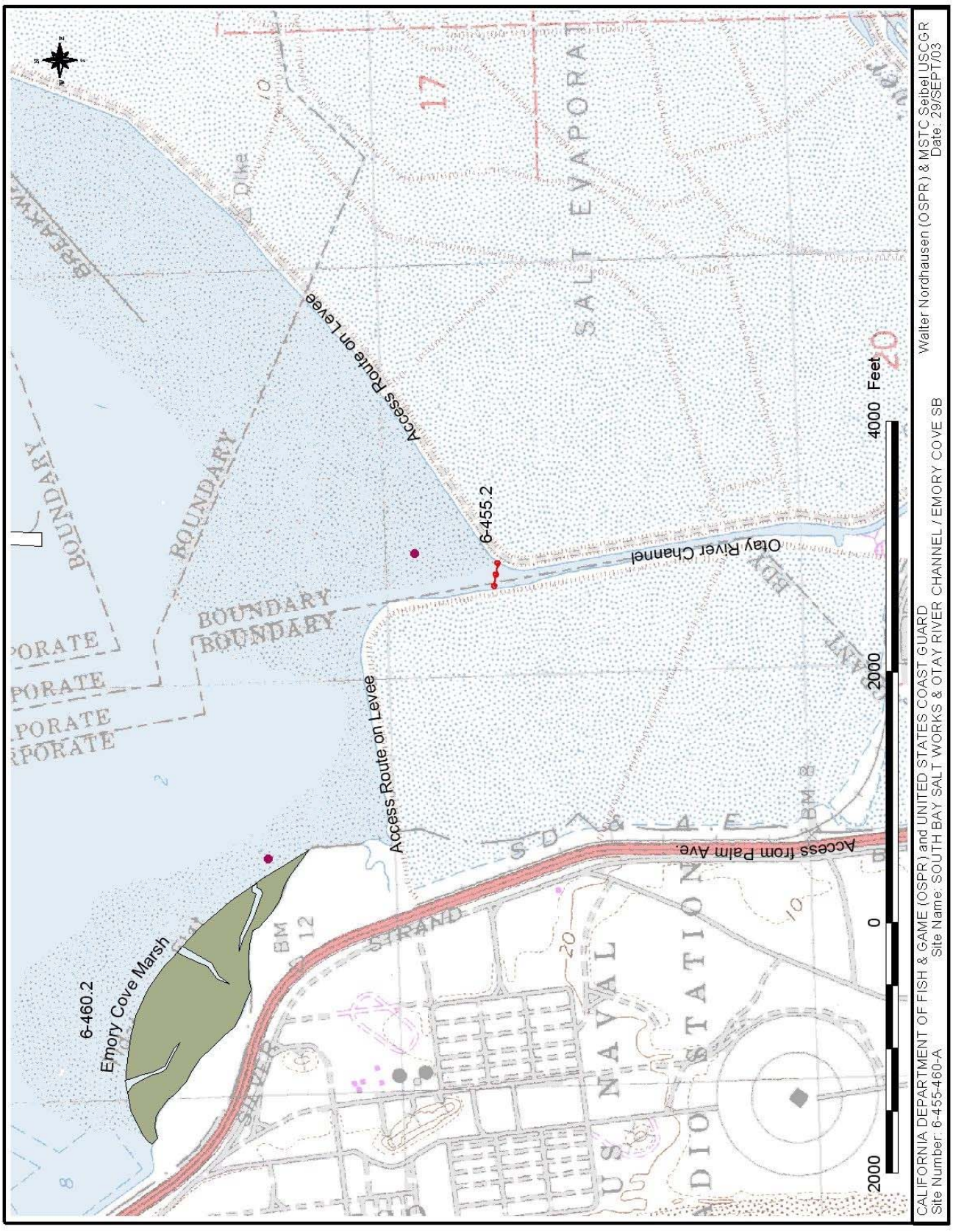
LAND ACCESS: Truck access from Silver Strand Blvd, or foot access

WATER LOGISTICS: Limited due to shallow water at flood tide
Limitations: depth, obstruction
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

6-460 -A Site Summary- Emory Cove 6-460 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	San Diego		32 30'30"	117 08'30"
USGS Quad:	Imperial Beach	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

Emory Cove is located in the extreme southwest corner of San Diego Bay. It is a relatively small marsh habitat maintained by tidal flooding through several narrow tidal channels. During very low tides, the beach face of the marsh may have an expansive sand/mud flat exposure. Very high tides will broadly flood the marsh area. Because the south bay is relatively shallow, any boat approaching this site must be shallow draft. Foot traffic can access the mash area without difficulty.

SEASONAL and SPECIAL RESOURCE CONCERN

No specific seasonal concerns are identified at this site. Adjacent bay and National Wildlife Refuge (salt works) surface waters may be used seasonally, and extensively, by a large number of marine birds and water fowl.

RESOURCES OF PRIMARY CONCERN

Numerous species of birds, invertebrates, and wetland vegetation occur here both seasonally and year-round. California brown pelicans are expected to be present year-round.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 2 – Notify South Coastal Information Center within 24 hours.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		National Marine Fisheries Service	(562) 980-4043
		Coastal and Marine Institute	(619) 594-7723
		CA Dept of Parks and Recreation	(909) 443-2969
		South Bay Salt Company	(619) 423-3388

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 30'30 Longitude W: 117 08'30"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

The site is located in the most southwesterly corner of San Diego Bay. This region of the bay experiences large changes in water surface area during very wide tidal ranges. At very low tides an expansive mud flat occupies the bay bottom. At very high tides, the marsh will be extensively flooded.

The protection of all south bay sites are two or three level responses. All sites rely first on the ability to capture oil at, or above, the 24th Street Terminal. Secondary strategies are put into motion when it becomes apparent that the primary strategy is likely to be inadequate.

Strategy 6-460.1 Objective: Prevent an off site oil spill from arriving at this site by booming and collecting oil at other locations in the bay.

Cross-Bay Boom strategy see 06-420.1

Strategy 6-460.2 Objective:

To prevent average tidal flood water from entering the tidal flood channels the several flood channels can be closed with sandbag berms. Each channel will require about 75 sandbags.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No and kinds	staff deploy	Staff tend
6-460.1					0		0	0					
6-460.2					0		0	0			15 shovels, 300 sandbags, sand		

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Land based vehicular traffic can access this site from Silver Strand Highway. Approaching from the south via Imperial Beach Ave is recommended. A small highway pull-off parking lot is located immediately adjacent to the marsh.

LAND ACCESS: All access available, truck through Silver strand Blvd.

WATER LOGISTICS: Limited due to shallow water at flood tide

Limitations: depth, obstruction

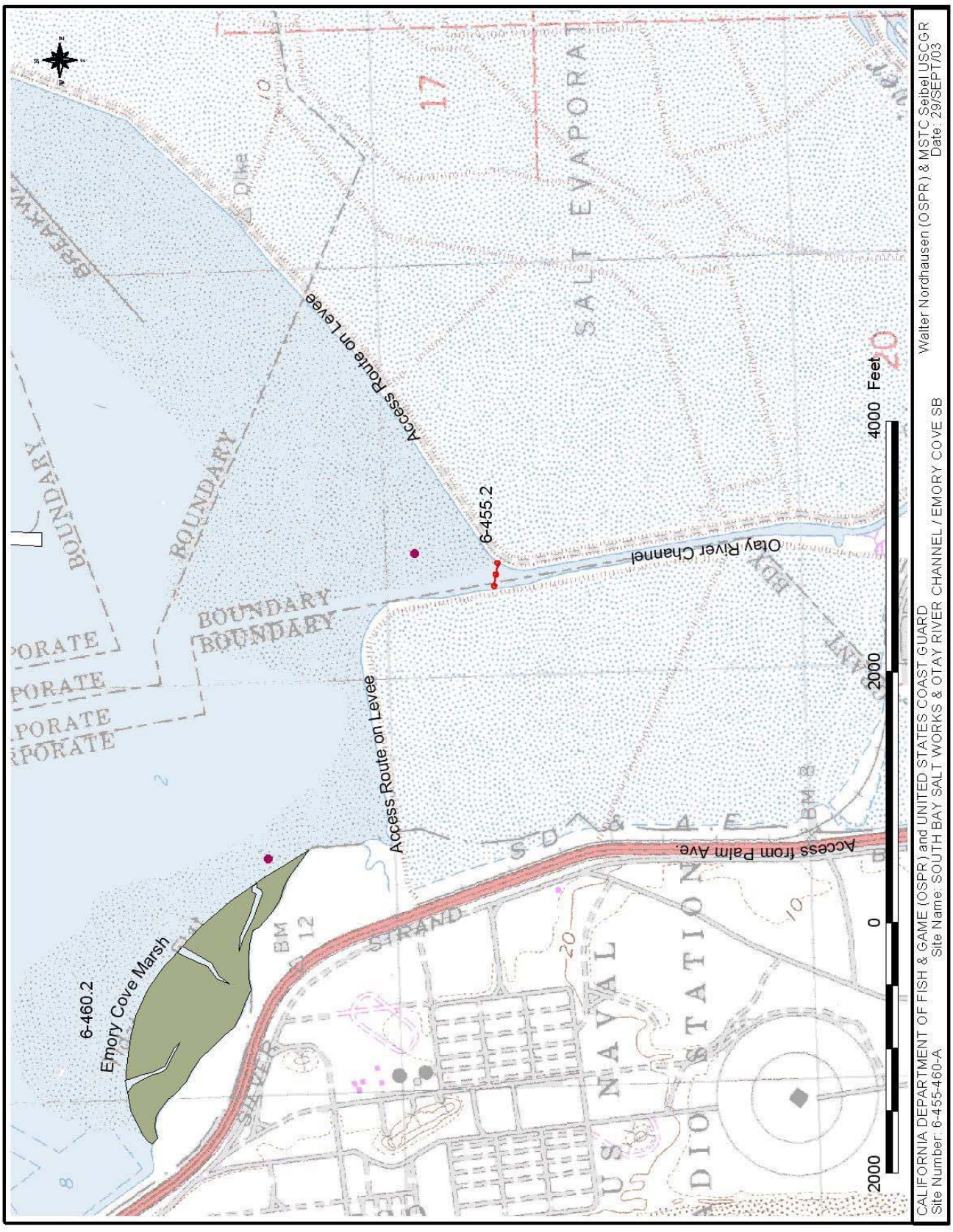
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging of sand bags can occur along the north and south ends of Emory Cove where parking area is available adjacent to the Hwy.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Thomas Guide Location	Latitude N	Longitude W
	32 33'24"	117 07'46"

County: San Diego
USGS Quad: Imperial Beach
NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:
Approx. 50' wide Tijuana River and the Tijuana Slough Complex. Approx. 50' wide leads to a large wildlife preserve. Caution should be exercised to limit impact to Snowy Plover and Least Tern nesting areas on the beach dune and beach. There is also a dune restoration project in the area. Clean-up crews should be cautioned about potential water quality biohazard from sewage contamination.

SEASONAL and SPECIAL RESOURCE CONCERN

Between April and September California least tern and Western snowy plover may be actively nesting on the beach face north and south of the river mouth.

RESOURCES OF PRIMARY CONCERN

California brown pelican are observed in the lagoon year-round. Belding's savannah sparrow and Light-footed clapper rail are present year round and will likely be nesting in the lagoon vegetation during summer. The Salt marsh bird's beak is the only listed plant species, and one of the few coastal sites with a plant listing present.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: 1 – Notify South Coastal Information Center immediately.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
		Coastal and Marine Institute	(619) 594-7723
C		CA Dept of Parks and Recreation	(909) 443-2969
E		Ca Dept. of Parks and Recreation	(619) 688-3260
E		San Diego County Parks and Recreation	(619) 525-8222

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: San Diego

NOAA CHART

Latitude N: 32 33'24 Longitude W: 117 07'46"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

Refer to ACP Site 6-000-A for important information on the beach nesting birds that use this site. Be prepared to use site monitors to evaluate and minimize any potential negative effects (especially to listed species), that could result from clean up and response activities at this site.

HAZARDS and RESTRICTIONS:

Access is possible from either the north or the south shore. The more convenient is from the north. From either direction, locked gates are present and key holders must be notified. During summer months Least Terns are likely to be nesting on the beach. USFWS must be consulted to avoid injury to nesting birds.

SITE STRATEGIES

The Tijuana River estuary mouth is open year-round. It is subject to a wide range of inland flow conditions, and should be avoided during rainfall episodes. It should be considered to have microbiological contamination and may be potential health hazard to clean-up crews. The estuary has three channel branches that may each require protective boom under certain conditions.

PROTECTION STRATEGIES: The Tijuana River protection strategy involves selecting between two different protection methods. The first possible method addresses the closure of the river mouth with a sand berm. Experience has demonstrated that tides in excess of +5 feet will severely limit the option of a sand berm closure. High tide combined with high surf condition of 5 feet or greater ensures that a sand berm will not succeed. With high energy conditions, protection strategy should shift to the use of harbor boom as exclusion / deflection at the three estuary channels deployed from the interior of the estuary.

Strategy 6-510.1 Objective:

Construct a 300 foot sand berm closure with underflow at the river mouth utilizing local beach sand.

Strategy 6-510.2 Objective:

2 Deploy 2-tier harbor boom exclusion across the three estuary channels. Direct floating oil to collections points.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-510.1					0		0	0			3	1 bulldozer, 2 frontloaders delivered to the site	9	
6-510.2	3000				24	light anchor systems	0	3					6	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

The mouth of the Tijuana River can be accessed along the beach face either from the south or north. Between April and September the beach is often used as a nesting area for California least terns and Western snowy plovers (both listed species). During summer months beach use may be severely restricted, or completely curtailed. Approx. 50' wide

LAND ACCESS:

WATER LOGISTICS:

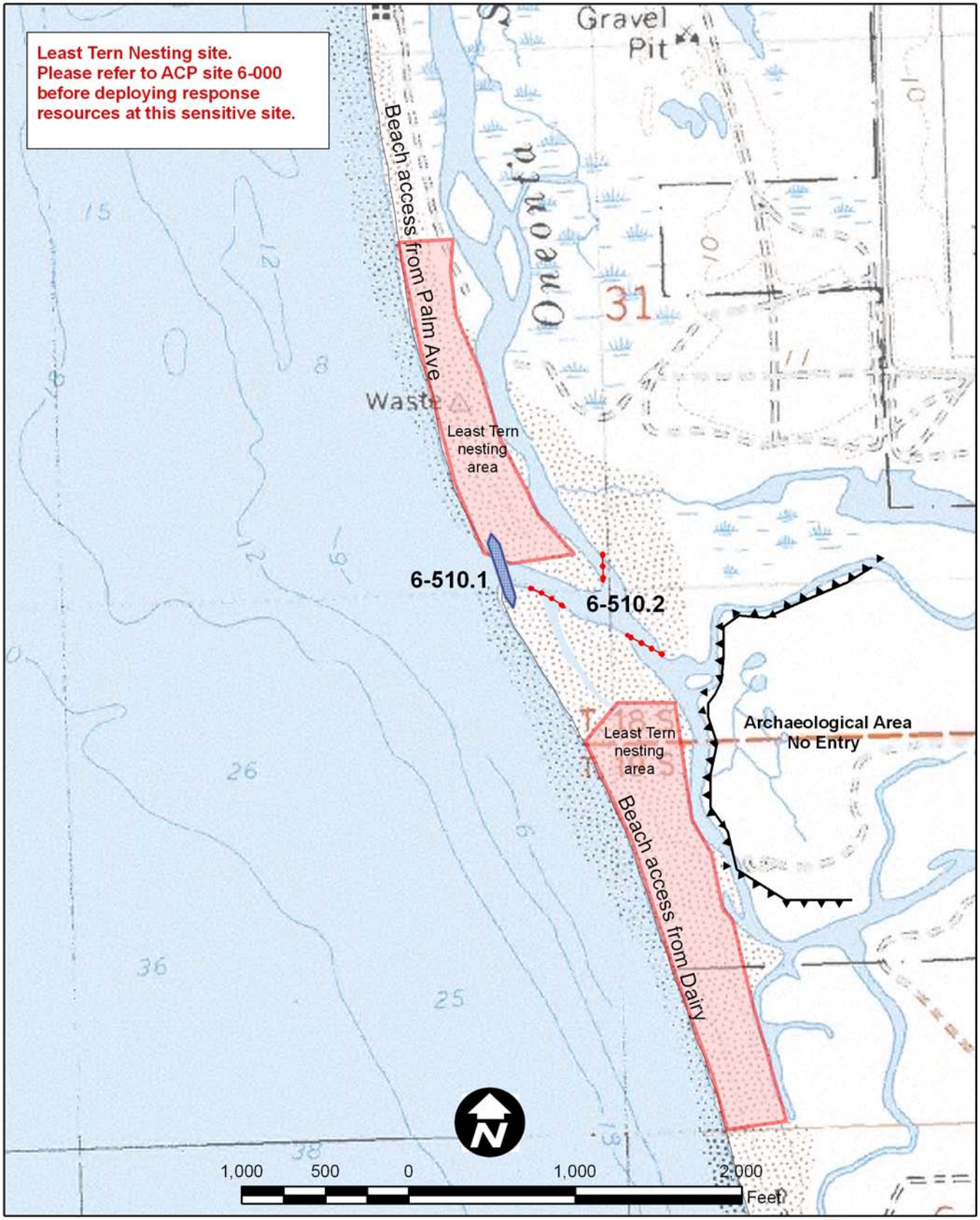
Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



CDFG-OSPR & USCG Site: 6-510-A Name: Tijuana River

Kris Wiese (OSPR) & Jo Sanders (OSPR) Date: Aug. 28, 2008

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- San Clemente Island, Castle Rock

6-610 -B

Thomas Guide Location	Latitude N	Longitude W
	33 02'04"	118 36'52"

County: Los Angeles

USGS Quad: San Clemente Island, North

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration. This site is on a free standing offshore rock utilized by large numbers of California brown pelicans and other bird species for roosting and resting.
This site is adjacent to a small arms range. Contact the San Clemente Island Security Office before responding on this Island.

SEASONAL and SPECIAL RESOURCE CONCERN

None identified

RESOURCES OF PRIMARY CONCERN

Large numbers of California brown pelican.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: Not Applicable.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E	Sail's on Tuesday	Naval Air Station 32nd Air Station Barge Office	(619) 556-1573
E	Wednesday Barge Service	San Clemente Island Pier Office	(619) 524-9331
E		San Clemente Island Security Office, duty officer	(619) 524-9214
T		USN-Coronado Natural Resources Office	(619) 545-1130

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: Los Angeles

NOAA CHART

Latitude N: 33 02'04 Longitude W: 118 36'52"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

San Clemente Island is a military facility with restricted access at all times. Contact must be made with the Security Office to obtain permission to enter before responding to sites on this Island. The Navy uses the Island for live fire exercises. Do not take the "un" out of unexploded ordnance hazards.

HAZARDS and RESTRICTIONS:

Note the presence of restricted or dangerous areas at various locations around the island. See san Clemente Island navigation chart (#18762).

SITE STRATEGIES

A free standing offshore rock utilized by large numbers of California brown pelicans and other bird species for roosting and resting.

Strategy 6-610.1 Objective:

Deploy boom tow array boats offshore of this site to intercept arriving petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No and kinds	staff deploy	Staff tend
6-610.1	1500				0		4	0				8	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

When sea conditions allow, this rock may be approached by small craft. San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration.

LAND ACCESS: Boat only. The navy has a 9,300' runway on SCI.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: Satellite phones are encouraged. Cell phones, maybe if you have Nextel service.

ADDITIONAL OPERATIONAL COMMENTS:

This is a military facility. Any planned emergency operations need to be coordinated with the Commander, Naval Base, Coronado for logistic support of government operations, and with the Commander, Naval Region, Southwest who is responsible for the natural resources and facilities on the Island. Pre-approval of any response within 300 yds of shore is mandatory.

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

6-620 -A Site Summary- San Clemente Island, Bird Rock

6-620 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	Los Angeles		33 02'15"	118 35'27"
USGS Quad:	San Clemente Island, North	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration. This site is on a free standing rock utilized by large numbers of birds and year round. Marine mammal haul-out site.
The grenade and detonation range on the main island is adjacent to this site. Contact the San Clemente Island Security Office before responding on this Island.

SEASONAL and SPECIAL RESOURCE CONCERN

None identified

RESOURCES OF PRIMARY CONCERN

Large numbers of birds nesting, roosting and resting. Sea lion and Harbor seal haul-out, with some pups present

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: Not Applicable.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E	Sail's on Tuesday	Naval Air Station 32nd Air Station Barge Office	(619) 556-1573
E	Wednesday Barge Service	San Clemente Island Pier Office	(619) 524-9331
E		San Clemente Island Security Office, duty officer	(619) 524-9214
T		USN-Coronado Natural Resources Office	(619) 545-1130

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location
Los Angeles

NOAA CHART

Latitude N 33 02'15 **Longitude W** 118 35'27"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

San Clemente Island is a military facility with restricted access at all times. Contact must be made with the Security Office to obtain permission to enter before responding to sites on this Island. The Navy uses the Island for live fire exercises. Do not take the "un" out of unexploded ordnance hazards.

HAZARDS and RESTRICTIONS:

Note the presence of restricted or dangerous areas at various locations around the island. See san Clemente Island navigation chart (#18762)

SITE STRATEGIES

A free standing rock utilized by large numbers of birds and year round. Marine mammal haul-out site.

Strategy 6-620.1 Objective:

Deploy boom tow array boats offshore of this site to intercept arriving petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No and kinds	staff deploy	Staff tend
6-620.1	1500				0		4	0				8	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

When sea conditions allow, this rock may be approached by small craft. San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration.

LAND ACCESS: Boat only. The navy has a 9,300' runway on SCI.

WATER LOGISTICS:

Limitations: depth, obstruction

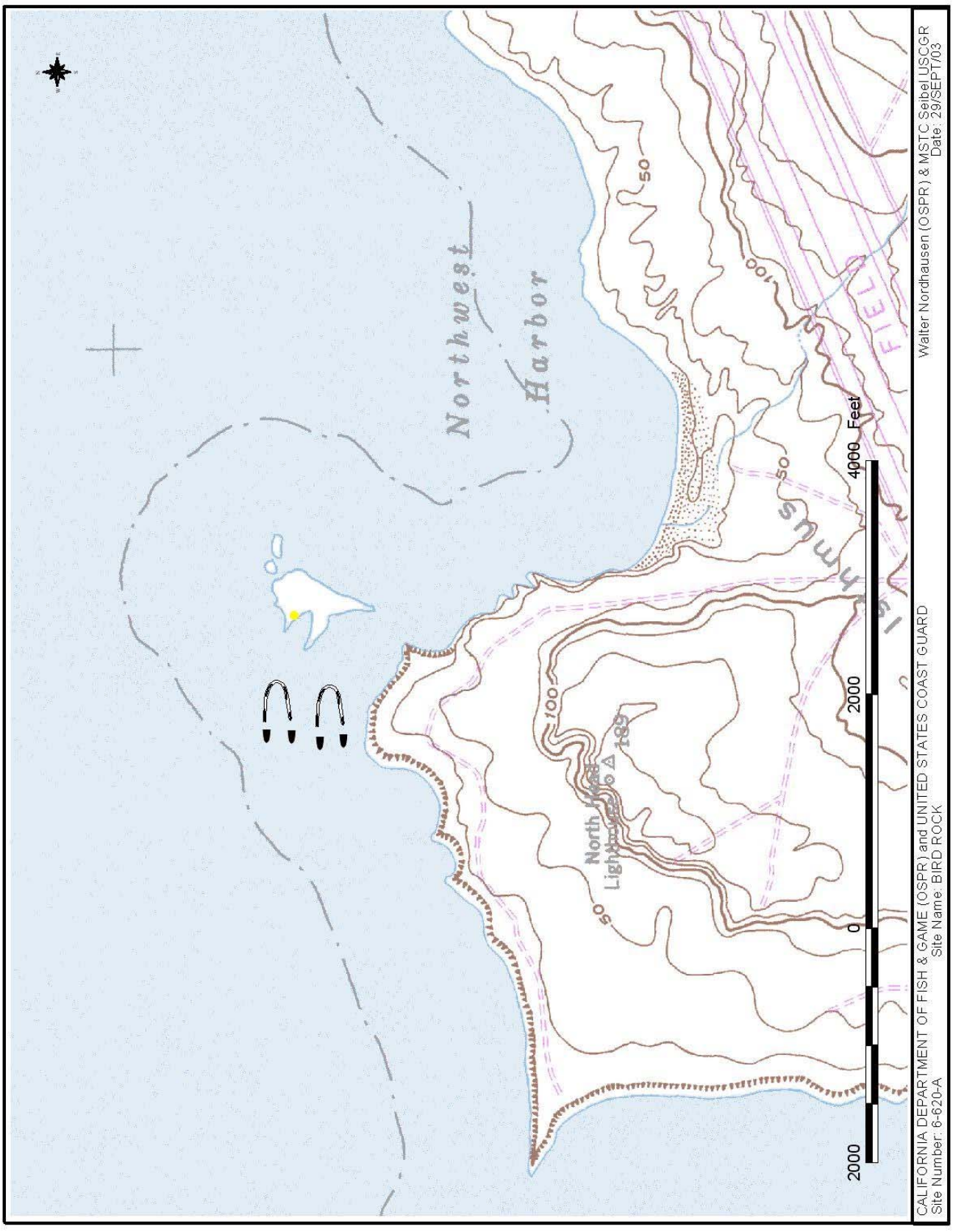
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: Satellite phones are encouraged. Cell phones, maybe if you have Nextel service.

ADDITIONAL OPERATIONAL COMMENTS:

This is a military facility. Any planned emergency operations need to be coordinated with the Commander, Naval Base, Coronado for logistic support of government operations, and with the Commander, Naval Region, Southwest who is responsible for the natural resources and facilities on the Island. Pre-approval of any response within 300 yds of shore is mandatory.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- San Clemente Island, Wilson Cove North Point

6-630 -B

		Thomas Guide Location	Latitude N	Longitude W
County:	Los Angeles		33 01'30"	118 33'12"
USGS Quad:	san Clemente Island North	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration. This area is located on the east side of San Clemente Island near the north end.

This site is near to a fuel storage farm on the island. Contact the San Clemente Island Security Office before responding on this Island.

SEASONAL and SPECIAL RESOURCE CONCERN

Potential oiling of adult Cormorants during summer nesting season can result in oiling of eggs, or chicks.

RESOURCES OF PRIMARY CONCERN

Large numbers of Cormorants nesting, roosting and resting.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: Not Applicable.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E	Sail's on Tuesday	Naval Air Station 32nd Air Station Barge Office	(619) 556-1573
E	Wednesday Barge Service	San Clemente Island Pier Office	(619) 524-9331
E		San Clemente Island Security Office, duty officer	(619) 524-9214
T		USN-Coronado Natural Resources Office	(619) 545-1130

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: Los Angeles

NOAA CHART

Latitude N: 33 01'30 Longitude W: 118 33'12"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

San Clemente Island is a military facility with restricted access at all times. Contact must be made with the Security Office to obtain permission to enter before responding to sites on this Island. The Navy uses the Island for live fire exercises. Do not take the "un" out of unexploded ordnance hazards.

HAZARDS and RESTRICTIONS:

Note the presence of restricted and dangerous areas at various locations around the island. See San Clemente Island navigation chart (#18762).

SITE STRATEGIES

This area is located on the east side of San Clemente Island near the north end.

Strategy 6-630.1 Objective:

Deploy boom tow array boats offshore of this site to intercept arriving petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-630.1	3000				0		8	0					16	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

When sea conditions allow, this shoreline may be approached by small craft. San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration.

LAND ACCESS: Boat only. The navy has a 9,300' runway on SCI.

WATER LOGISTICS:

Limitations: depth, obstruction

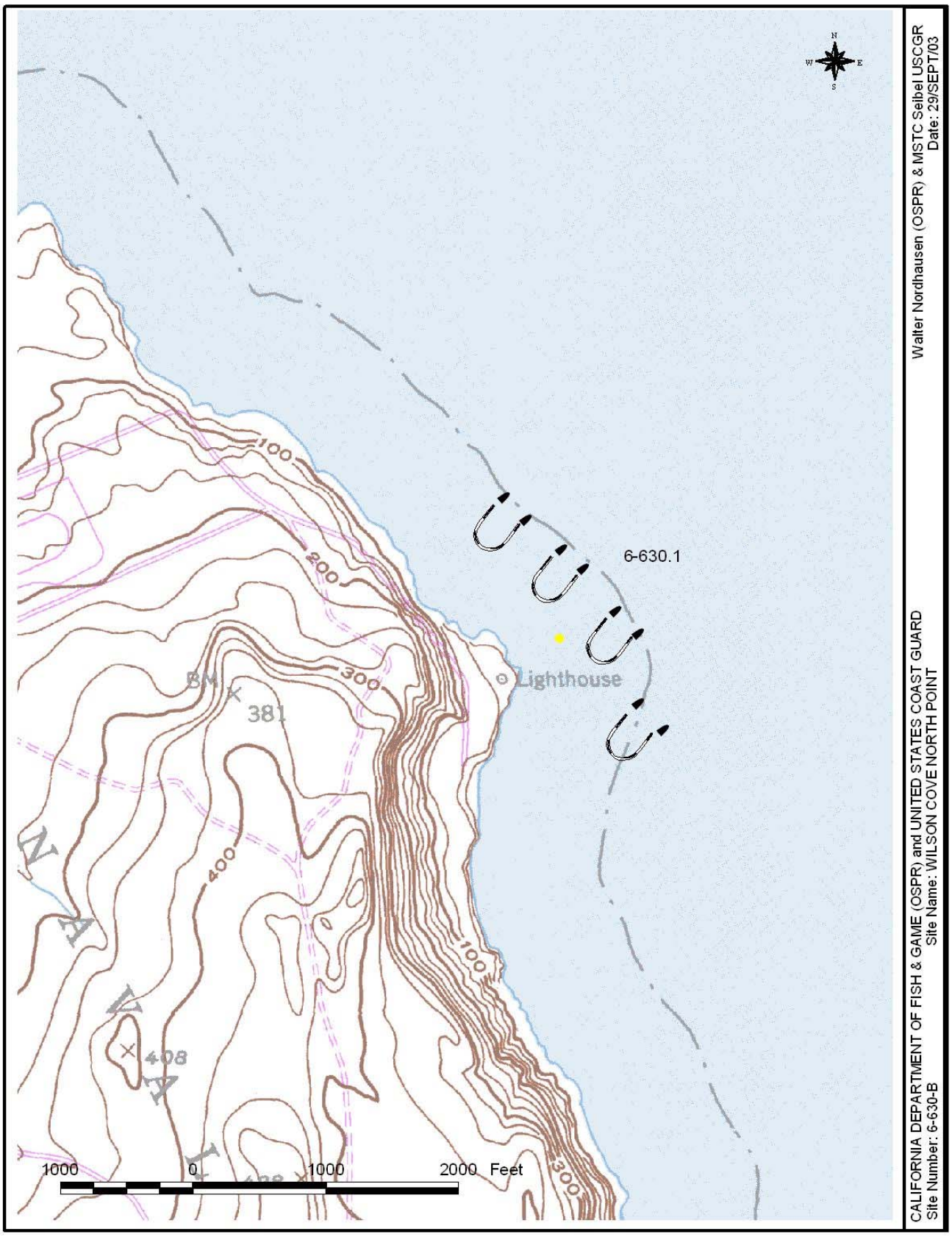
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: Satellite phones are encouraged. Cell phones, maybe if you have Nextel service.

ADDITIONAL OPERATIONAL COMMENTS:

This is a military facility. Any planned emergency operations need to be coordinated with the Commander, Naval Base, Coronado for logistic support of government operations, and with the Commander, Naval Region, Southwest who is responsible for the natural resources and facilities on the Island. Pre-approval of any response within 300 yds of shore is mandatory.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

		Thomas Guide Location	Latitude N	Longitude W
County:	Los Angeles		33 00'45"	118 33'40"
USGS Quad:	San Clemente Island North	NOAA Chart:		

Last Page Update : 9/1/2008

SITE DESCRIPTION:

San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration. This area is located on the east side of San Clemente Island near the north end.

This site is near the fuel pumping facility on the main island. Contact the San Clemente Island Security Office before responding on this Island.

SEASONAL and SPECIAL RESOURCE CONCERN

Potential oiling of adult Cormorants during summer nesting season can result in oiling of eggs, or chicks.

RESOURCES OF PRIMARY CONCERN

Large numbers of Cormorants nesting, roosting and resting.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: Not Applicable.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E	Sail's on Tuesday	Naval Air Station 32nd Air Station Barge Office	(619) 556-1573
E	Wednesday Barge Service	San Clemente Island Pier Office	(619) 524-9331
E		San Clemente Island Security Office, duty officer	(619) 524-9214
T		USN-Coronado Natural Resources Office	(619) 545-1130

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: Los Angeles

NOAA CHART

Latitude N: 33 00'45 Longitude W: 118 33'40"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

San Clemente Island is a military facility with restricted access at all times. Contact must be made with the Security Office to obtain permission to enter before responding to sites on this Island. The Navy uses the Island for live fire exercises. Do not take the "un" out of unexploded ordnance hazards.

HAZARDS and RESTRICTIONS:

Note the presence of restricted and dangerous areas at various locations around the island. See San Clemente Island navigation chart. (#18762)

SITE STRATEGIES

This area is located on the east side of San Clemente Island near the north end.

Strategy 6-640.1 Objective:

Deploy boom tow array boats offshore of this site to intercept arriving petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-640.1	3000				0		8	0					16	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

When sea conditions allow, this shoreline may be approached by small craft. San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration.

LAND ACCESS: Boat only. The navy has a 9,300' runway on SCI.

WATER LOGISTICS:

Limitations: depth, obstruction

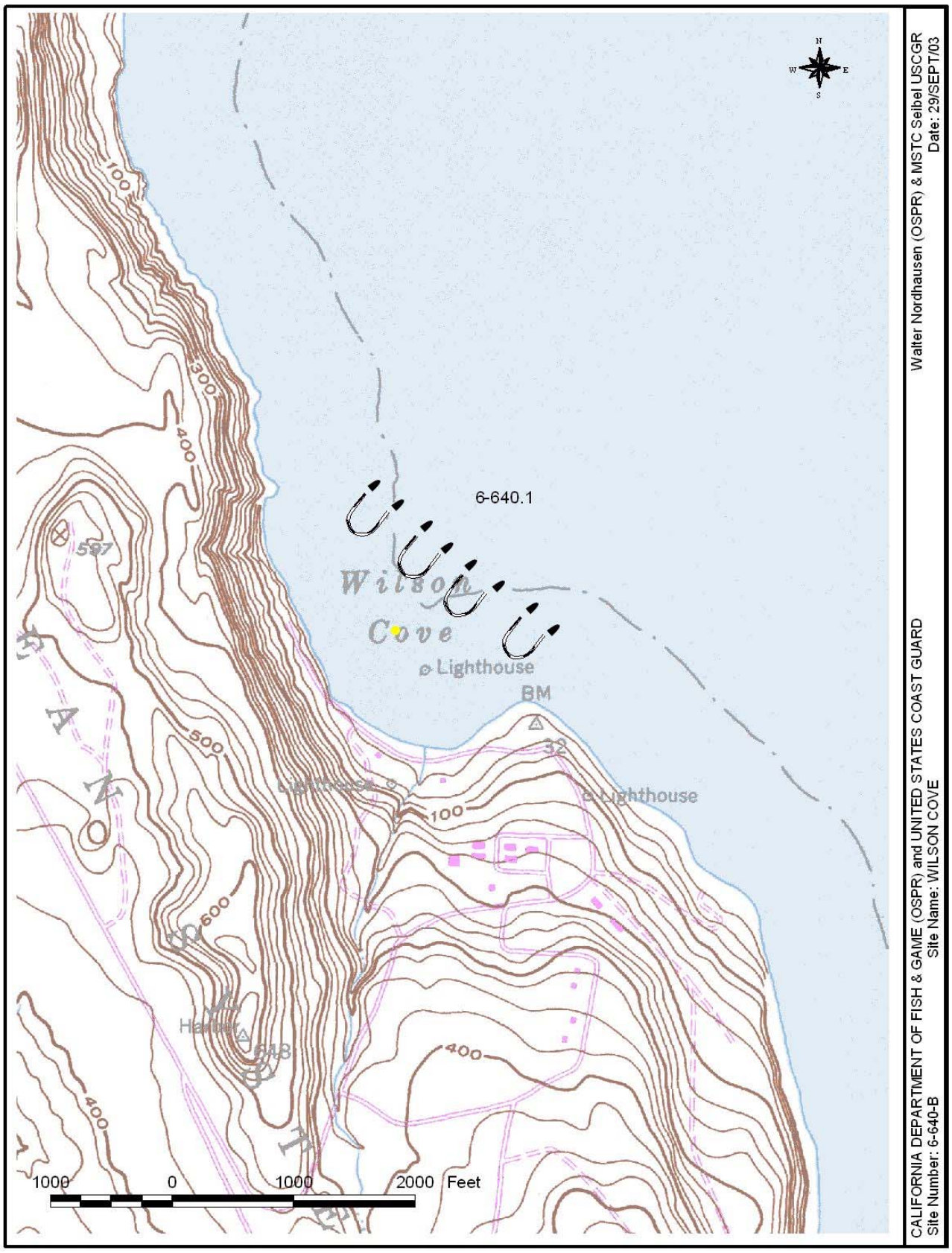
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: Satellite phones are encouraged. Cell phones, maybe if you have Nextel service.

ADDITIONAL OPERATIONAL COMMENTS:

This is a military facility. Any planned emergency operations need to be coordinated with the Commander, Naval Base, Coronado for logistic support of government operations, and with the Commander, Naval Region, Southwest who is responsible for the natural resources and facilities on the Island. Pre-approval of any response within 300 yds of shore is mandatory.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- San Clemente Island, Seal Cove to Mail Point

6-650 -A

Thomas Guide Location	Latitude N	Longitude W
	32 54'22"	118 32'14"

County: Los Angeles

USGS Quad: San Clemente Island, Central

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration. This is a 1.75 mile shoreline section located on the north-central, west side of San Clemente Island. It is exposed to open sea conditions and should be considered difficult to approach by sea. Contact the San Clemente Island Security Office before responding on this Island.

SEASONAL and SPECIAL RESOURCE CONCERN

Large numbers of Cormorants nesting, roosting and resting. During summer nesting season can result in oiling of eggs, or chicks.

RESOURCES OF PRIMARY CONCERN

Potential oiling of California sea lions, elephant seals, harbor seals, along with cormorants, western gulls, and California brown pelican.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: Not Applicable.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E	Sail's on Tuesday	Naval Air Station 32nd Air Station Barge Office	(619) 556-1573
E	Wednesday Barge Service	San Clemente Island Pier Office	(619) 524-9331
E		San Clemente Island Security Office, duty officer	(619) 524-9214
T		USN-Coronado Natural Resources Office	(619) 545-1130

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location	NOAA CHART	Latitude N	Longitude W
Los Angeles		32 54'22	118 32'14"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

San Clemente Island is a military facility with restricted access at all times. Contact must be made with the Security Office to obtain permission to enter before responding to sites on this Island. The Navy uses the Island for live fire exercises. Do not take the "un" out of unexploded ordnance hazards.

HAZARDS and RESTRICTIONS:

Note the presence of restricted or dangerous areas at various locations around the island. See san Clemente Island navigation chart (#18762).

SITE STRATEGIES

This is a 1.75 mile shoreline section located on the north-central, west side of San Clemente Island. It is exposed to open sea conditions and should be considered difficult to approach by sea.

Strategy 6-650.1 Objective:

Deploy boom tow array boats offshore of this site to intercept arriving petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special No	Special and	Equipment or comment kinds	staff deploy	Staff tend
6-650.1	3000				0		8	0						16	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

This shoreline is accessible to shoreline cleanup crews from the shore side. San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration.

LAND ACCESS: Boat only. The navy has a 9,300' runway on SCI.

WATER LOGISTICS:

Limitations: depth, obstruction

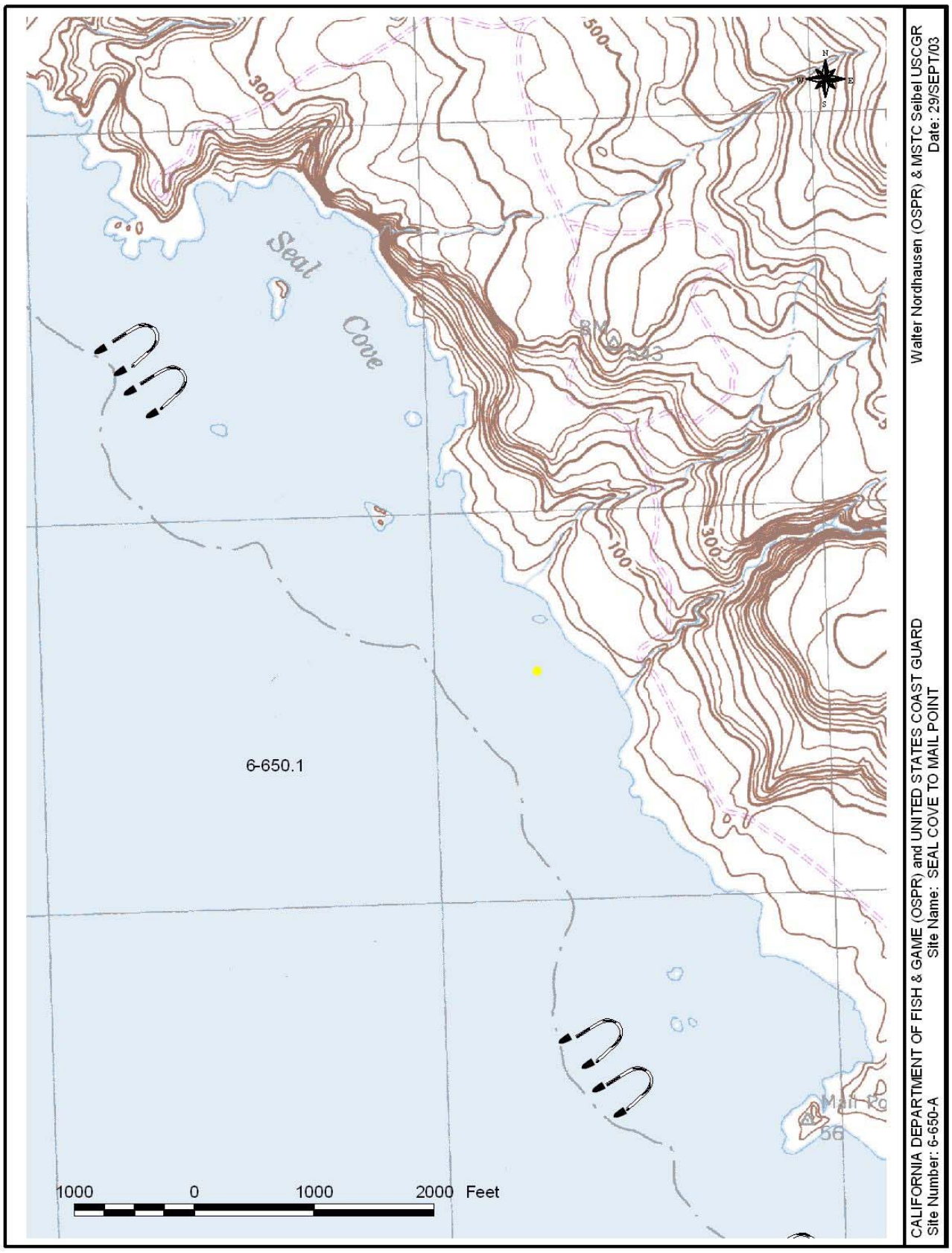
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: Satellite phones are encouraged. Cell phones, maybe if you have Nextel service.

ADDITIONAL OPERATIONAL COMMENTS:

This is a military facility. Any planned emergency operations need to be coordinated with the Commander, Naval Base, Coronado for logistic support of government operations, and with the Commander, Naval Region, Southwest who is responsible for the natural resources and facilities on the Island. Pre-approval of any response within 300 yds of shore is mandatory.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- San Clemente Island, Mail Point to SE 1 Nmile

6-660 -A

Thomas Guide Location	Latitude N	Longitude W
	32 53'05"	118 31'16"

County: Los Angeles

USGS Quad: San Clemente Island, Central

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration. This is a 1.0 mile shoreline section located on the central, west side of San Clemente Island. It is exposed to open sea conditions and should be considered difficult to approach by sea. Contact the San Clemente Island Security Office before responding on this Island.

SEASONAL and SPECIAL RESOURCE CONCERN

California sea lion pupping during May to October. Elephant seal pupping during December to April. Cormorants nesting April to July. Western gulls nesting May to September.

RESOURCES OF PRIMARY CONCERN

Potential oiling of sea lions, elephant seals, harbor seals, adults and pups, along with cormorants, western gulls, and California brown pelican and their eggs and chicks.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: Not Applicable.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E	Sail's on Tuesday	Naval Air Station 32nd Air Station Barge Office	(619) 556-1573
E	Wednesday Barge Service	San Clemente Island Pier Office	(619) 524-9331
B		National Marine Fisheries Service	(562) 980-4017
E		San Clemente Island Security Office, duty officer	(619) 524-9214
T		USN-Coronado Natural Resources Office	(619) 545-1130

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: Los Angeles

NOAA CHART

Latitude N: 32 53'05 Longitude W: 118 31'16"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

San Clemente Island is a military facility with restricted access at all times. Contact must be made with the Security Office to obtain permission to enter before responding to sites on this Island. The Navy uses the Island for live fire exercises. Do not take the "un" out of unexploded ordnance hazards.

HAZARDS and RESTRICTIONS:

Note the presence of restrictions and dangerous areas located around the island. See san Clemente Island navigation chart (#18762).

SITE STRATEGIES

This is a 1.0 mile shoreline section located on the central, west side of San Clemente Island. It is exposed to open sea conditions and should be considered difficult to approach by sea.

Strategy 6-660.1 Objective:

Deploy boom tow array boats offshore of this site to intercept arriving petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special No	Special and	Equipment or comment kinds	staff deploy	Staff tend
6-660.1	3000				0		8	0						16	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

This shoreline is accessible to shoreline cleanup crews from the shore side. San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration.

LAND ACCESS: Boat only. The navy has a 9,300' runway on SCI.

WATER LOGISTICS:

Limitations: depth, obstruction

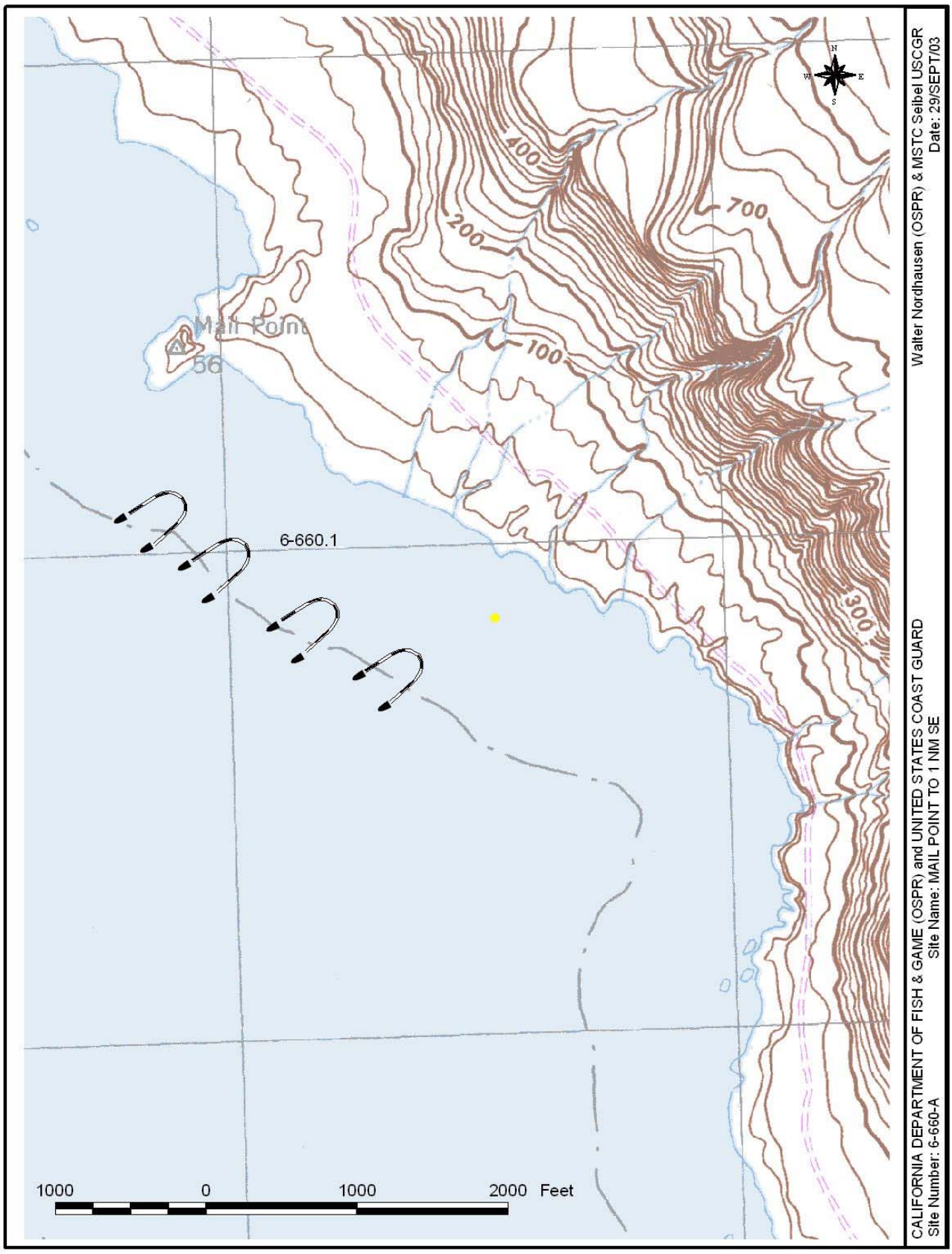
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: Satellite phones are encouraged. Cell phones, maybe if you have Nextel service.

ADDITIONAL OPERATIONAL COMMENTS:

This is a military facility. Any planned emergency operations need to be coordinated with the Commander, Naval Base, Coronado for logistic support of government operations, and with the Commander, Naval Region, Southwest who is responsible for the natural resources and facilities on the Island. Pre-approval of any response within 300 yds of shore is mandatory.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- San Clemente Island, Lost Point

6-670 -B

Thomas Guide Location	Latitude N	Longitude W
	32 50'40"	118 29'20"

County: Los Angeles

USGS Quad: San Clemente Island South

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration. This is a 1.1 mile shoreline section located on the south-central, west side of San Clemente Island. It is exposed to open sea conditions and should be considered difficult to approach by sea.

This site is within the shoreline bombardment area. Contact the San Clemente Island Security Office before responding on this Island.

SEASONAL and SPECIAL RESOURCE CONCERN

None identified

RESOURCES OF PRIMARY CONCERN

Potential oiling of harbor seals, adults and pups

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: Not Applicable.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E	Sail's on Tuesday	Naval Air Station 32nd Air Station Barge Office	(619) 556-1573
E	Wednesday Barge Service	San Clemente Island Pier Office	(619) 524-9331
B		National Marine Fisheries Service	(562) 980-4017
E		San Clemente Island Security Office, duty officer	(619) 524-9214
T		USN-Coronado Natural Resources Office	(619) 545-1130

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: Los Angeles

NOAA CHART

Latitude N: 32 50'40 Longitude W: 118 29'20"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

San Clemente Island is a military facility with restricted access at all times. Contact must be made with the Security Office to obtain permission to enter before responding to sites on this Island. The Navy uses the Island for live fire exercises. Do not take the "un" out of unexploded ordnance hazards.

HAZARDS and RESTRICTIONS:

Note the presence of restricted or dangerous areas at various locations around the island. See San Clemente Island navigation chart #18762. Located inside designated "danger area".

SITE STRATEGIES

This is a 1.1 mile shoreline section located on the south-central, west side of San Clemente Island. It is exposed to open sea conditions and should be considered difficult to approach by sea.

Strategy 6-670.1 Objective:

Deploy boom tow array boats offshore of this site to intercept arriving petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special No	Special and	Equipment or comment kinds	staff deploy	Staff tend
6-670.1	3000				0		8	0						16	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

This shoreline is accessible to shoreline cleanup crews from the shore side. San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration.

LAND ACCESS: Boat only. The navy has a 9,300' runway on SCI.

WATER LOGISTICS:

Limitations: depth, obstruction

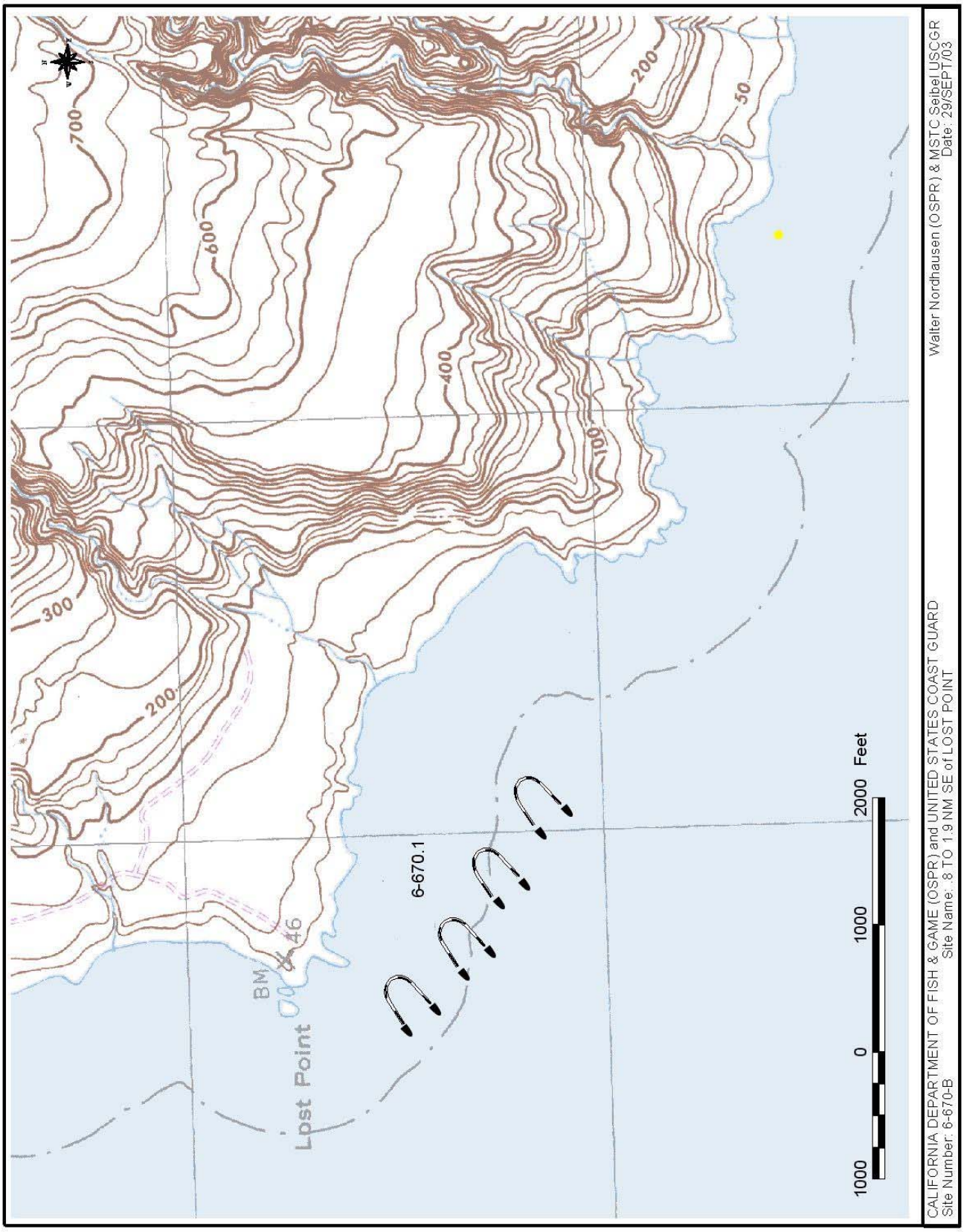
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: Satellite phones are encouraged. Cell phones, maybe if you have Nextel service.

ADDITIONAL OPERATIONAL COMMENTS:

This is a military facility. Any planned emergency operations need to be coordinated with the Commander, Naval Base, Coronado for logistic support of government operations, and with the Commander, Naval Region, Southwest who is responsible for the natural resources and facilities on the Island. Pre-approval of any response within 300 yds of shore is mandatory.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Site Summary- San Clemente Island, Mosquito Point

6-680 -A

Thomas Guide Location	Latitude N	Longitude W
	32 51'03"	118 23'10"

County: Los Angeles

USGS Quad: San Clemente Island South

NOAA Chart:

Last Page Update : 9/1/2008

SITE DESCRIPTION:

San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration. This site is a bird nesting and roosting area approximately 0.9 n mile southeast of Mosquito Cove on the east side of San Clemente Island, near the south end of the Island. It is somewhat protected from open sea conditions and may be approachable by sea.
This site is within the shoreline bombardment area. Contact the San Clemente Island Security Office before responding on this Island.

SEASONAL and SPECIAL RESOURCE CONCERN

Cormorant nesting during May to July

RESOURCES OF PRIMARY CONCERN

Potential oiling of adult cormorants resulting in oiling of eggs and chicks during breeding season.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

ARCHAEOLOGICAL PRIORITY: Not Applicable.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E		San Clemente Island Security Office, duty officer	(619) 524-9214
E	Sail's on Tuesday	Naval Air Station 32nd Air Station Barge Office	(619) 556-1573
E	Wednesday Barge Service	San Clemente Island Pier Office	(619) 524-9331
T		USN-Coronado Natural Resources Office	(619) 545-1130

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location: Los Angeles

NOAA CHART

Latitude N: 32 51'03 Longitude W: 118 23'10"

Last Page Update : 9/1/2008

CONCERNS and ADVICE to RESPONDERS:

San Clemente Island is a military facility with restricted access at all times. Contact must be made with the Security Office to obtain permission to enter before responding to sites on this Island. The Navy uses the Island for live fire exercises. Do not take the "un" out of unexploded ordnance hazards.

HAZARDS and RESTRICTIONS:

Note the presence of restricted and dangerous areas at various locations around the island. See san Clemente Island navigation chart #18762.

SITE STRATEGIES

This site is a bird nesting and roosting area approximately 0.9 n mile southeast of Mosquito Cove on the east side of San Clemente Island, near the south end of the Island. It is somewhat protected from open sea conditions and may be approachable by sea.

Strategy 6-680.1 Objective:

Deploy boom tow array boats offshore of this site to intercept arriving petroleum.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special No	Special Equipment or comment and kinds	staff deploy	Staff tend
6-680.1	3000				0		8	0					16	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

This shoreline is inaccessible to shoreline cleanup crews from the shore side due to the high, steep cliffs characteristic of the east side of the island. San Clemente Island (SCI) is the southernmost of the eight California Channel Islands. It lies 55 nautical miles (nm) south of Long Beach and 68 nm west of San Diego. The island is approximately 21 nm long and is 4-1/2 nm across at its widest point. Since 1934, the island has been owned and operated by various naval commands. More than a dozen range and operational areas are clustered within a 60 mile radius of the island. The Commander-in-Chief, Naval Forces, Pacific (CINCPACFLT) is the major claimant for the island, and Naval Air Station, North Island (NASNI) is responsible for its administration.

LAND ACCESS: Boat only. The navy has a 9,300' runway on SCI.

WATER LOGISTICS:

Limitations: depth, obstruction

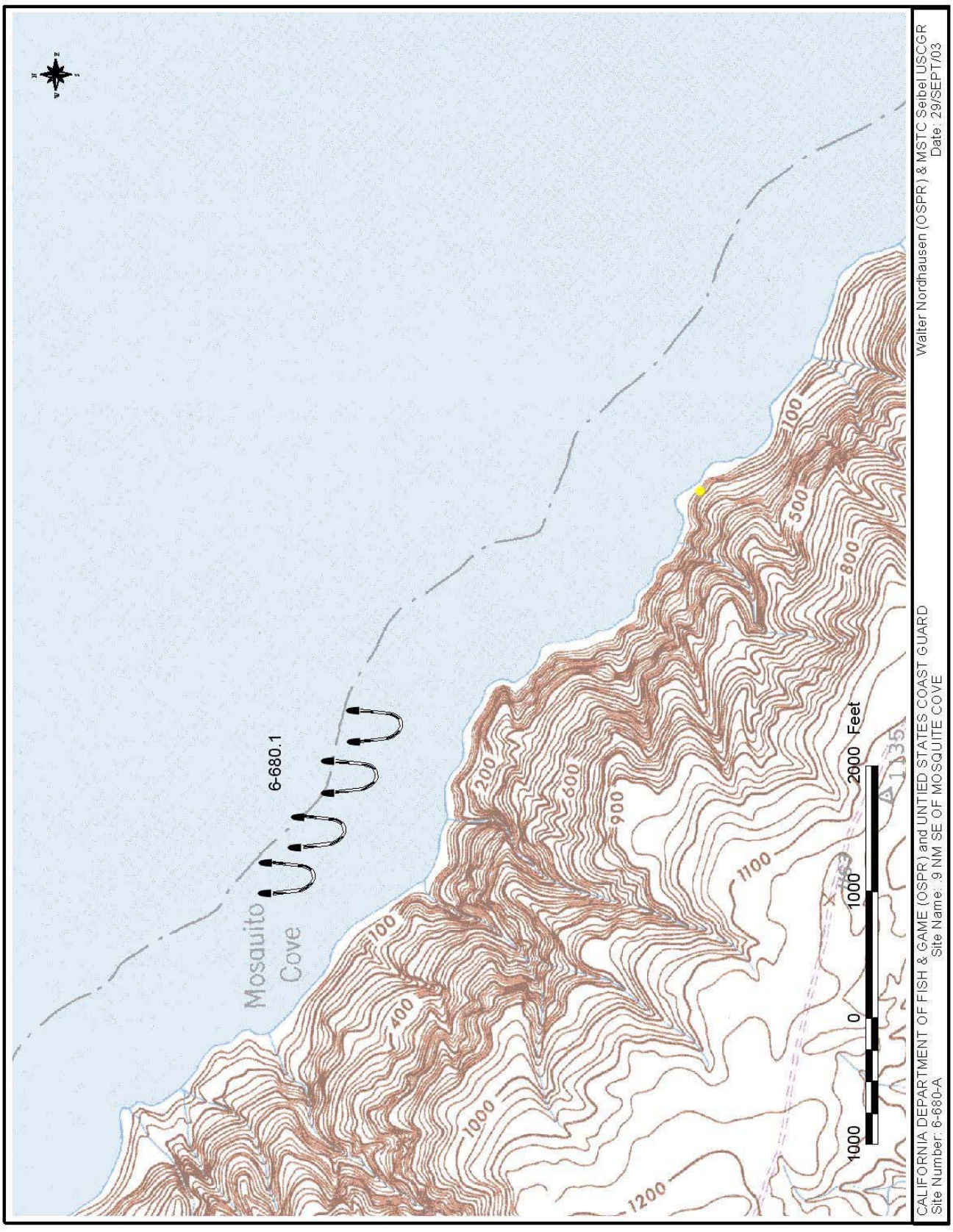
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: Satellite phones are encouraged. Cell phones, maybe if you have Nextel service.

ADDITIONAL OPERATIONAL COMMENTS:

This is a military facility. Any planned emergency operations need to be coordinated with the Commander, Naval Base, Coronado for logistic support of government operations, and with the Commander, Naval Region, Southwest who is responsible for the natural resources and facilities on the Island. Pre-approval of any response within 300 yds of shore is mandatory.



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

9810.2 Cultural and Other Resources at Risk

This sub-section provides cultural and other resources at risk information that may not be included in sensitive site information. This section addresses those kinds of issues.

Cultural or historic resources details are noted on the site summary pages when sensitive sites overlap cultural sites. However, most cultural resource information is very confidential. The Cultural and Historic Resources Information System (CHRIS) is an elaborate database maintained by the Office of Historic Preservation of the California Department of Parks and Recreation. Access to the database is restricted and similar information is not publicly available here in order to keep these resources as secure as possible. The draft **CALIFORNIA IMPLEMENTATION GUIDELINES FOR FEDERAL ON-SCENE COORDINATORS FOR THE PROGRAMMATIC AGREEMENT ON PROTECTION OF HISTORIC PROPERTIES DURING EMERGENCY RESPONSE UNDER THE NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN** provides the process to protect and conserve cultural and historic resources during a response. Details here are for local contacts and similar local information.

This section also includes information such as "Essential Fish Habitat" or other variable resource patterns which may occur in a Geographic Response Area.

9810.21 Cultural and Historic Resources

Please see the information regarding Cultural and Historic Resources provided on the Site Summary page in the Sensitive Site section (9810.12).

9810.22 Essential Fish Habitat

Ocean fisheries are managed under the Fishery Conservation and Management Act of 1976, now known as the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The Act provided the National Marine Fisheries Service (NMFS) legislative authority for fisheries regulation in the United States, in the area between three-miles to 200 miles offshore.

In 1996, the Magnuson-Stevens Act was re-authorized and amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267) to emphasize the sustainability of the nation's fisheries and establish a new standard by requiring that fisheries be managed at maximum sustainable levels and that new approaches be taken in habitat conservation. This habitat is called "Essential Fish Habitat" (EFH). The Act established procedures designed to identify, conserve, and enhance EFH for those species regulated under a Federal fisheries management plan.

The purpose of addressing habitat in this act is to provide for one of the nation's overall marine resource management goals – maintaining sustainable fisheries. As evidenced for all wildlife resources, suitable habitat is essential for their subsistence. Although the concept of EFH is similar to that of "Critical habitat" under Endangered Species Act (ESA), measures recommended to protect EFH by NMFS or a Council are advisory, not proscriptive. An effective EFH consultation process is crucial to ensuring that Federal actions serve the Magnuson-Stevens Act resource management goals. For those species currently listed under ESA, but not necessarily under EFH, individuals and habitats must be protected and consultation with NMFS and/or United States Fish & Wildlife Service (USFWS) should be implemented.

The MSA requires Federal agencies to consult with NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH (MSA §305(b)(2)). See ACP Section 4800 for consultation procedures.

EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (MSA §3). For the purpose of interpreting this definition of EFH: **Waters** include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; **substrate** includes sediment, hard bottom, structures underlying the waters, and associated biological communities; **necessary** means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers a species' full **life cycle** (50 CFR 600.10). **Adverse effect** means any impact which reduces quality and/or quantity of EFH, and may include direct (*e.g.*, contamination or physical disruption), indirect (*e.g.*, loss of prey or reduction in species fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions (50 CFR 600.810).

The EFH mandate applies to all species managed under a federal Fishery Management Plan (FMP). For the Pacific West Coast (excluding Alaska), there are FMPs, covering groundfish, coastal pelagic species, and Pacific salmonids. Therefore, Federal agencies must consider the impact of a proposed action on EFH for any species managed under those FMPs. A brief description of EFH identified in each FMP follows. Detailed descriptions are contained in the references following the EFH Assessment template.

Groundfish: EFH for Pacific coast groundfish is defined as the aquatic habitat necessary to allow for groundfish production to support long-term sustainable fisheries for groundfish and for groundfish contributions to a healthy ecosystem. Descriptions of groundfish EFH for each of the 83 species and their life stages result in more than 400 EFH identifications. When these EFHs are taken together, **the groundfish EFH includes all waters from the mean higher high water line, and the upriver extent of saltwater intrusion in river mouths, along the coasts of Washington, Oregon and California seaward to the boundary of the U.S. exclusive economic zone (EEZ).**

Coastal pelagic species: Amendment 8 to The Coastal Pelagic Species Fishery Management Plan describes the habitat requirements of five pelagic species: Northern anchovy, Pacific sardine, Pacific (chub) mackerel, jack mackerel and market squid. These four finfish and market squid are treated as a single species complex because of similarities in their life histories and habitat requirements. EFH for coastal pelagic species is defined as: **The east-west geographic boundary of EFH for CPS is defined to be all marine and estuarine waters from the shoreline along the coasts of California, Oregon and Washington offshore to the limits of the EEZ and above the thermocline where sea surface temperatures range between 10o – 26o C. The southern boundary is the U.S.-Mexico maritime boundary. The northern boundary is more dynamic, and is defined as the position of the 10o C isotherm, which varies seasonally and annually.**

Pacific salmonids - chinook, coho, steelhead and Puget Sound pink salmon: EFH for the Pacific coast salmon fishery means those waters and substrate necessary for salmonid production needed to support a long-term sustainable salmonid fishery and salmonid contributions to a healthy ecosystem. To achieve that level of production, EFH includes all those streams, lakes, ponds, wetlands, and other currently viable water bodies and most of the habitat historically accessible to salmon in Washington, Oregon, Idaho, and California. Southern steelhead may have occupied as much as 15% of the winter steelhead range in California, but the present distribution in southern California has been reduced to perhaps 1% of the stream miles they formerly inhabited (E. Gerstung, in: CDFG, 1995). **The Evolutionary Significant Unit includes all naturally spawned populations of Southern California steelhead (and their progeny) in streams from the Santa Maria River to**

Malibu Creek. **- In the estuarine and marine areas, salmon EFH extends from the near shore and tidal submerged environments within state territorial waters out to the full extent of the exclusive economic zone (370.4 km) offshore of Washington, Oregon, and California north of Point Conception. - Freshwater EFH for Pacific salmon includes all those streams, lakes, ponds, wetlands, and other water bodies currently, or historically accessible to salmon in Washington, Oregon, Idaho, and California, except areas upstream of certain impassable man-made barriers (as identified by the PFMC), and longstanding, naturally-impassable barriers (i.e., natural waterfalls in existence for several hundred years).**

References

Casillas, E., L. Crockett, Y. deReynier, J. Glock, M. Helvey, B. Meyer, C. Schmitt, M. Yoklavich, A. Bailey, B. Chao, B. Johnson and T. Pepperell. 1998. Essential Fish Habitat West Coast Groundfish Appendix, National Marine Fisheries Service, 778 pp.

Calif. Dept. of Fish and Game (CDFG). 1995. *Fish species of special concern in California.* By Moyle, Yoshiyama, and Williams. Sacramento. 272 p.

PFMC (Pacific Fishery Management Council). 1999. Amendment 14 to the Pacific Coast Salmon Plan. Appendix A: Description and Identification of Essential Fish Habitat, Adverse Impacts and Recommended Conservation Measures for Salmon (August 1999).

PFM (Pacific Fishery Management Council). 1998. Final Environmental Assessment/Regulatory Review for Amendment 11 to the Pacific Coast Groundfish Fishery Management Plan (October 1998).

PFMC (Pacific Fishery Management Council). 1998. The Coastal Pelagic Species Fishery Management Plan: Amendment 8 (December 1998).

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9810.3 Economically Sensitive Sites

The primary purpose of this section is to identify and incorporate into emergency response planning, the specific resources subject to injury or damages from an oil spill event. It identifies through lists, tables maps, and text, many of the economic resources that face potential damages due to an oil spill. Limitations of time, personnel, and the availability of information caused that not all resources of significant economic value and susceptible to marine oil spills could be identified at this time.

People involved with response planning recognize that throughout California's marine waters, along the State's shoreline, and within coastal communities are many resources of economic importance that could be severely impacted by an oil spill incident.

Relation to Environmentally Sensitive Areas in Section 9810

Section 9810 contains maps and site summary sheets with information about the environmental sensitivity of specific locations within the planning area. State and Federal law establish three priority levels for dedication of emergency oil spill response resources.

First Priority - Protection of human health and safety

Second Priority - Protection of environmental resources

Third Priority - Protection of economic resources

Examples of resources that will receive a first priority response (human health and safety) includes:

-power plant intakes
-drinking water intakes
-public use areas at risk
-desalinization plants
-other health/safety intakes
(e.g. fire departments)
(e.g. hazardous fumes)

Environmentally sensitive sites are designated as the second priority for oil spill response resources. Environmental sites are categorized in section 9810 using a scale of A, B, and C. Sites ranked with an A are the most sensitive to an oil spill.

<u>Economically Sensitive Areas</u>

Strictly economic resources are designated as the third priority for dedication of oil spill response resources, following human health and safety and environmental resources. The economic sites are ranked using a continuation of the environmental scale with D, E, and F categories. Economic resources that have a greater potential for long-term damages receive a higher rank or priority for emergency response.

Response planners recognize that marine resources can have environmental, economic, and cultural or historical importance, such as coastal parks or important fishing, areas. In these cases, the higher environmental ranking would be used for response planning. The need to set priorities for protection will occur only when response equipment or resources are inadequate to handle a given spill volume.

The Area Contingency Plan is a planning document intended to assist oil spill response personnel during actual response activities and with pre-spill planning. The Unified Command requires flexibility in planning response activities. This flexibility is necessary to provide the most appropriate response to a given spill event.

Criteria-for Priority Response and Types of Economic Resources

The following criteria or definitions are used to categorize economic resources in terms of priority for response:

D = Economic activities and resources which require high water quality for their operations or existence. Resources that fall into this category would face severe, long-term economic impacts from a spill. This category includes commercial fishing areas (also have environmental rank), aqua culture and mariculture areas, marine labs, salt pond intakes, aquarium water intakes, etc.'

E = Facilities, businesses, or resources which directly use coastal or bay waters within their economic activity and which are at risk of oiling from a spill in marine waters. The resources falling into this category would face significant disruption of their activity, but shorter term potential damages from iling than resources in the "D" category. This category would include resources such as marinas, harbors, commercial piers, industrial intakes, and parks or recreational areas.

F = This category contains marine associated facilities, businesses and resources. These resources would face economic impacts from a marine spill, but do not depend directly on marine water for their economic base. Resources in this category will tend to face less severe damages than those identified in categories D or E. This category includes economic resources such as waterfront hotels, restaurants, shops, and residential areas. (Note: residential sites would be evacuated to avoid health risks).

Types of Economically Significant Resources and Ranking

Listed below are various types of significant economic resources potentially at risk from oiling- and the appropriate response priority category.

- aqua culture, mariculture (D)

- aquariums, marine labs (D)

- facility intakes [not affecting public health] (D)

- parks, beaches, recreational areas (E)

- vessel or boat traffic areas: shipping, lanes, harbor entrances, river mouths, bays, anchorages (E,)

- marinas, houseboat areas (E)

- ferries and tour boats (E)

- port or harbor facilities (E)

- boat moorings, cargo piers, terminals, fishing piers (E)

- ship or boat repair shops (E)

- tourist hotel, restaurant areas (F)

- waterfront residential areas (F)

Information About Sensitive Economic Resources

Section 9810 contains lists, and/or maps of sensitive economic areas or resources. Below is a description of the types of information that can be provided for each identified economic resource or facility. Some information is unavailable for specific resources identified within this section.

1. Resource or facility identification number
2. Geographic location of resource or facility
3. Brief description of the resource at risk
4. Contact names and numbers (24 hour access if available)
5. Priority response ranking

9810.31 Water Intake Facilities

This table lists area water intake information including: firm name, address, phone number, size of intake, and area served.

INTAKE OPERATOR	*SIZE*	*USE*	*AREA SERVED*	*RANKING*
06-101 **Kelco** 2145 E. Belt St. San Diego, CA 92113 (619) 232-0604	<100 GPM	Washing floors	Kelco	**D**
06-102 **U.S. NavSta** Public Works Center Harbor Dr. at 32nd St. San Diego, CA 92113 Duty Desk: (619) 556-7349	Variety of intakes both permanent and portable	Serves the salt water system on base		**D**
67-103 **NASSCO** Harbor Dr. at 28th St. San Diego, CA 92113 (619) 544-8401	2-36" pipes 2-24" pipes 6-24" pipes	Flooding the dry-dock area Floating Dock	Building Dock	**D**
06-104 **Sea World - Mission Bay** 1720 S. Shores Rd. San Diego, CA 92109 (619) 222-6363 (619) 226-3800 (night) Attn: Security	5,500 GPM	Water for marina life tanks	Sea World Park	**D**
06-105 **Scripps Institution of Oceanography** 8602 La Jolla Shores Dr. La Jolla, CA 92073 Attn: Trouble Deck (858) 534-2930 or 534-3851 (858) 534-7962 (day) or (858) 753-2197 (night)	900 GPM	For aquariums and some experimental work with marine life	Scripps	**D**
06-106 **Hubbs-SeaWorld** White Sea bass Fish Hatchery Agua Heionda Lagoon Carlsbad, CA 92008 (760) 434-9501 Attn: Hatchery Mgr	2-12" pipes @ ' Live fish @ 12’ depth 600 to 12000 gpm		Hatchery holding maintenance tanks	**D**

INTAKE OPERATOR	*SIZE*	*USE*	*AREA SERVED*	*RANKING*
06-108 **Cabrillo Power** Encina Power Plant 4600 Carlsbad Blvd. Carlsbad, CA 92008 (760) 268-4000 Attn: Duty Engineer	595,200 GPM		Cooling. All plants feed energy into a grid that serves the entire metro area	**D**
06-109 **So. California Edison** San Onofre Power Plant Units 1, 2, and 3 Oceanside, CA 92054 (949) 368-3000 Attn: Duty Engineer	2,270,000 GPM		Cooling. Energy is fed into two grids; 24% to S.D. grid 6% to the SoCal Edison grid	**D**
06-110 **So. California Edison** Silvergate Power Plant 1348 Sampson St. San Diego, CA 92113 1(800) 684-8123 This plant is NON-OPERATING	154,300 GPM		Cooling. All plants feed energy into a grid that serves the entire metro area	**D**
06-111 **Duke Energy** South Bay Power Plant 990 Bay Blvd. Chula Vista, CA 92011 (619) 420-7383 Attn: Duty Engineer	417,400 GPM		Cooling. All plants feed energy into a grid that serves he entire metro area	**D**
06-112 **South Bay Salt Co.** 1470 Bay Blvd. Chula Vista, CA 92011 (619) 423-3388			Extract salt. Tide gate west of Otay Channel controlled by water pressure with tidal action	**D**

Registered Marine Aquaculture Facilities

This section lists areas operated for the purpose of commercial production of biological resources.

LEASEE	*No. ACRES*	*GROWING AREA*	*PRODUCTS*	*RANKING*
06-113 **DAVID LAPOTE** 6678 Hemingway Dr. San Diego, CA 92109 NO LISTING	1.0	Mission Bay Quivira Basin R & D	Red & Green Abalone and Quahog clams	**D**
06-114 **DON GILBERT** MARITECH OCEANRANCHING P.O. Box 60731 San Diego, CA 92166 (619) 226-3448	0.0	San Diego Bay R & D	Abalone	**D**
06-115 **HUBBS-SEA WORLD** White Seabass Fish Hatchery Agua Hedionda Lagoon Carlsbad, CA 92008 (619) 434-9501	0.0	Agua Hedionda lagoon	White sea bass	**D**

9810.32 Commercial Facilities/Dry-dock Facilities

Listed below are waterfront terminals and dry-dock facilities in the San Diego area of responsibility.

Waterfront Terminals

06-120 **10th Avenue Marine Terminal.**
A 96-acre facility situated along the Coronado Bay Bridge. It is the center of commercial shipping activity and contains many bulk-handling (e.g. soda ash, potash, palm oil, cement, etc.) operations of the Port, including a bulk silo complex and a traveling bulkloader for grains and chemicals and other dry bulk products. A new Cold Storage Facility was opened in February 1993 and is expected to increase vessel traffic to the terminal.
Economic Ranking: E

06-121 **National City Marine Terminal.**
A 125-acre complex located at the foot of 24th Street. The principal inbound cargoes are lumber, automobiles, minerals, and fuel oil. This terminal also contains a container handling facility with a high-speed, all-electric container crane capable of handling 20-foot and 40-foot units, or single hook lifts of 40 long tons.
Economic Ranking: E

06-122 **B-Street Pier/Broadway Pier.**
Cruise Ship Terminal located between the foot of Broadway and A Street.
Economic Ranking: E
Dry-dock Facilities

06-123 **National Steel and Shipbuilding Co.** (NASSCO)
28th St. and N. Harbor Dr.
San Diego, CA
(619) 544-8401

Economic Ranking: E

06-124 **Driscoll's Mission Bay**
1500 Quivira Way
Mission Bay, CA
(619) 221-8456
Economic Ranking: E

06-125 **South Bay Boat Yard**
G St. Chula Vista
San Diego, CA
(619) 427-6767
Economic Ranking: E

06-126 **Driscoll Boat Works, Inc.**
2500 Shelter Island Dr.
San Diego, CA
(619) 226-2500
Economic Ranking: E

06-127 **Continental Maritime**
Bay Front St.
San Diego, CA
(619) 234-8851
Economic Ranking: E

06-128 **Southwest Marine Inc.**
2205 E. Belt
San Diego, CA
(619) 238-1000
Economic Ranking: E

06-129 **Neilsen Beaumont**
2420 Shelter Island Dr.
San Diego, CA
(619) 222-4255

Economic Ranking: E

06-130 **Shelter Island Boatyard**
2330 Shelter Island Dr.
San Diego, CA
(619) 222-0481
Economic Ranking: E

9810.33 Marinas/Recreational Areas

Marinas and Mooring Areas – Refer to Logistics Section 5400 Area Resources Information; Economic Ranking for all Marinas/Moorings is (E).

Coastal Recreation Areas

This section lists beaches, parks, and piers located along the coast from San Mateo Point to the Mexican Border. For area beach and park contacts not listed, contact the San Diego City Parks & Recreation Department (city parks and beaches), CA Dept. of Parks & Recreation (state parks and beaches) or the San Diego Lifeguard Services Division-at (619) 221-8899 or (619) 221-8800 (after hours).

06-188 **San Onofre State Beach.**
Wide, sandy beach below sandstone bluffs. Located north and south of the San Onofre Nuclear Generating Station, the state beach includes several well-known surfing spots (949) 492-0802.
Economic Ranking: E.

06-189 **Camp Pendleton Beach Access.**
Restricted access beach popular for surf fishing and camping (760) 725-3360.
Economic Ranking: E.

06-190 **Harbor Beach.**
Wide, sandy beach with surf and rock fishing (760) 966-4580.
Economic Ranking: E.

06-191 **Oceanside City Beach.**
Popular beach for swimming, surfing, and surf fishing (760) 966-4580.
Economic Ranking: E

06-192 **Oceanside Pier.**
1,942 foot-long municipal pier with bait and tackle shops, restaurant, and lifeguard station (760) 966-4580.
Economic Ranking: E

06-193 **Linear Park.**
Landscaped concrete walkway along the bluff top with benches and view platforms.
Economic Ranking:E

06-194 **Buccaneer Park.**
Picnic area with outdoor showers, playground, baseball diamond, volleyball court, and concession stand.
Economic Ranking: E

06-195 **South Oceanside Beach.**
Popular Beach for swimming, surfing, and surf fishing (760) 466-4580.
Economic Ranking: E

06-196 **Carlsbad City Beach.**
Popular beach for swimming, surfing, and surf fishing.
Economic Ranking: E

06-197 **Carlsbad State Beach.**
Sandy and rocky beach backed by bluffs, with benches, picnic tables, and grassy areas. Popular beach for swimming, surfing, diving, and rock and surf fishing (760) 438-5143.
Economic Ranking:E

06-198 **Agua Hedionda Lagoon.**
Calm water within the lagoon makes it a popular swimming, fishing, and water-skiing spot.
Economic Ranking: E

06-199 **South Carlsbad State Beach.**
Campsite located along the bluffs. Beach is noted for swimming, surfing, surf fishing, and diving (760) 438-3143.
Economic Ranking: E

06-200 **Beacon's Beach.**
Formerly known as Leucadia State Beach, a sandy, bluff-backed beach. Popular surfing, swimming, surf fishing, and skin diving area.
Economic Ranking: E.

06-201 **Encinitas Beach.**
Narrow, sandy beach popular for swimming and surf fishing.
Economic Ranking: E.

06-202 **Stone Steps Beach**.
A long, partially stone stairway leads to a very narrow cobble beach used for swimming, surfing, and surf fishing.
Economic Ranking: E.

06-203 **Moonlight Beach.**
A sandy beach popular for surfing, swimming, and surf fishing.
Economic Ranking: E.

06-204 **Swami's**.
Narrow, sand/gravel beach that is known for excellent surfing. Surf fishing, scuba diving, and swimming are also popular.
Economic Ranking: E

06-205 **San Elijo State Beach.**
Cobble beach popular for surf fishing, swimming, skin diving, and surfing (760) 753-5091.
Economic Ranking: E

06-206 **Cardiff State Beach.**
Sandy beach popular for surfing, swimming, and surf fishing. North end of beach is a landing and launch zone for carry-on and soft bottom boats (760) 753-5091.
Economic Ranking: E

06-207 **Tide Beach Park.**
Sandy beach popular for surfing, skin diving, swimming, and surf fishing.
Economic Ranking: E

06-208 **Fletcher Cove Park.**
Sandy beach popular for diving, swimming, surfing, surf fishing, and catching grunion. Park facilities include: basketball, shuffleboard courts, sand volleyball courts, and picnic tables.
Economic Ranking: E

06-209 **Stairway to Beach (Seascape Surf).**
Wooden stairway leading to a sandy beach popular for surfing, skin diving, surf fishing, swimming, and grunion.
Economic Ranking: E

06-210 **Stairway to Beach (Del Mar Shores Terrace).**
Stairway leading to a sandy beach popular for surf fishing, catching grunion, swimming, and surfing.
Economic Ranking: E

06-211 **Del Mar Bluffs City Park.**
Sandy Beach at the mouth of San Dieguito River popular for swimming and surf fishing.
Economic Ranking: E

06-212 **Del Mar City Beach.**
Wide, sandy beach; good swimming and surfing. Other activities include catching grunion and surf fishing.
Economic Ranking: E

06-213 **Seagrove Park.**
Grassy area with paved path and benches on the bluffs overlooking the ocean.
Economic-Ranking: E

06-214 **Torrey Pines State Beach.**
Wide, sandy beach backed by steep sand stone bluffs. Popular activities include picnicking, swimming, surfing, surf fishing, clamming, and skin diving (858) 452-8732.
Economic Ranking: E

06-215 **Torrey Pines City Park**
Park located on sandstone bluffs overlooking the ocean.
Economic Ranking: E

06-216 **Torrey Pines City Beach (Black's Beach).**
Popular sandy beach backed by hazardous bluffs. Beach is noted for good swimming and surf fishing.
Economic Ranking: E

06-217 **La Jolla Shores Beach/Kellogg Park.**
Wide, sandy beach with good swimming, surfing, surf fishing, and skin-diving. Kellogg Park, east of the beach promenade, has grassy areas, picnic tables, and fire pits.
Economic Ranking: E

06-218 **La Jolla Cove.** Small cove with a sandy beach; very popular for diving, swimming, and surf fishing.
Economic Ranking: E

06-219 **Ellen Scripps Park.**
A grassy picnic area on the blufftop includes picnic tables, firepits, and shuffleboard courts. Path and stairs lead down to Boomer Beach, popular for body surfing.
Economic Ranking: E

06-220 **Children's Pool Beach.**
Stairs lead to a sandy beach and to a paved path along the breakwater. Popular swimming and surf fishing spot.
Economic Ranking: E

06-221 **Coast Boulevard Park.**
Shoreline park with benches and picnic tables; paths along Coast Blvd. lead to a sandy beach and rocky shore.
Economic Ranking: E

06-222 **Nicholson Point Park.**
Stairway leading to a sandy beach noted for swimming, diving, fishing, and body surfing.
Economic Ranking: E

06-223 **Marine Street Beach.**
Sandy beach popular for swimming, surfing, skin diving, and surf fishing. Horseshoe Reef, a popular surfing spot, is just north of Marine St.
Economic Ranking: E

06-224 **Wind and sea Beach.**
One of the most popular surfing spots on the coast; swimming is also popular.
Economic Ranking: E

06-225 **La Jolla Strand Park.**
Seasonally sandy beach noted for swimming and surfing.
Economic Ranking: E

06-226 **Hermosa Terrace Park.**
Small, seasonally sandy beach. Popular swimming and surfing spot; fishing from the rocky shore south of Winamar Rd.
Economic Ranking: E

06-227 **La Jolla Hermosa Park.**
Small blufftop park with benches and picnic tables.
Economic Ranking: E

06-228 **Bird Rock.**
Rocky point; popular fishing, surfing, and skin diving spot.
Economic Ranking: E

06-229 **Sun Gold Point.**
Viewpoints overlook a rocky beach with tidepools. Stairway at end of Linda Way leads to rocky cove popular for fishing.
Economic Ranking: E

06-230 **Cal-Met Park.**
Picnic area situated on bluffs above a cobblestone beach.
Economic Ranking: E

06-231 **Tourmaline Surfing Park**
Rocky beach popular for surfing, fishing, skin diving, and sea kayaking.
Economic Ranking: E

06-232 **Palisades Park.**
Paths lead from a grassy picnic area to a wide, sandy beach.
Economic Ranking: E

06-233 **Pacific Beach Park.**
Landscaped picnic area overlooks the ocean; street ends provide access to a sandy beach used for surfing and swimming. Separate paved paths for pedestrians and bicycles parallel the beach.
Economic Ranking: E

06-234 **Crystal Pier.**
Located at the end of Garnet Ave., the pier is open from 7 a.m. to sunset for walking and fishing.
Economic Ranking: E

06-235 **Mission Beach Park.**
Sandy beach with areas posted for surfing and body surfing. A paved promenade runs along the beach and is popular for walking, jogging, roller skating, and bicycling. Belmont Park, located at the old amusement park site, has shops, restaurants, and family amusements. Shops line the promenade south of W. Mission Bay Dr. Basketball courts and a play field are at the south end of the beach.
Economic Ranking: E

06-236 **Bonita Cove.**
Used for swimming, picnicking, over-the-line softball, and volleyball. Transient vessel anchorage allowed in cove.
Economic Ranking: E

06-237 **Ventura Cove.**
Sandy beach, grassy picnic area with fire rings and a paved path. Popular swimming spot for small children. Bahia Point to the north has a grassy picnic area and a small sandy beach.
Economic Ranking: E

06-238 **Santa Clara Point and El Carmel Point.**
Facilities at Santa Clara Point include the city's boathouse, a one-lane concrete boat launch, a dock, a water-ski landing and take-off area, barbecue grills, a baseball field, tennis courts, multi-purpose courts, and a city-operated recreation center (619) 490-0928. The Mission Bay Yacht Club, a parking area, and a sandy beach are located on El Carmel Point, about .4 mile south of Santa Clara Point. A sandy beach is located between the two points in San Juan Cove and continues south through Santa Barbara Cove. Bayside Walk, a bicycle and pedestrian path, parallels the beach.
Economic Ranking: E

06-239 **Sail Bay and Riviera Shores.**
The northwest portion of Mission Bay. Grassy park with a children's play area with access to a sandy beach at sail bay. Bayside Walk, a paved bicycle and pedestrian path, follows the bay shore from Sail Bay south to W. Mission Bay Drive. Riviera Shores is a sandy swimming beach with a water-ski take-off and landing area.
Economic Ranking: E

06-240 **Crown Point Shores.**
Sandy beach area with picnic area, children's play area, physical fitness course, water-ski landing and take-off areas, and public loading dock (619) 276-8200.
Economic Ranking: E

06-241 **Vacation Isle and Ski Beach.**
Vacation Isle is bisected by Ingraham St.; the west side has a hotel and golf course, boat rentals, a youth camp, and a model boat pond. North Cove Public Beach, on the northwest side, is a small sandy beach with picnic tables and a paved path. South Cove is located by the boat basin on the southwest side. Ski Beach, on the east side of the island, is a noted water-skiing and boating spot, with a water-ski take-off and landing area, a four-lane concrete boat launch, a dock, picnic areas, volleyball courts, and a swimming beach (619) 276-8200.
Economic Ranking: E

06-242 **Dana Landing and Quivira Basin.**
24-hour, 5 lane concrete boat ramp across from the landing. Sunset Point is a public park and popular fishing spot with picnic facilities and a paved path. Quivira Basin includes a large grassy picnic area with sport fishing and marina services. A bicycle path runs from the basin east along Sea World Dr. and Friars Rd., and connects with another bicycle path that runs along E. Mission Bay Dr.
Economic Ranking: E

06-243 **Sea World.**
A 135-acre aquarium and theme park located on the southern shore of Mission Bay. Attractions include marine life shows and displays, rides, snack bars, and gift shops (619) 222-6363/226-3800.
Economic Ranking: E

06-244 **Fiesta Island.**
Undeveloped island used for jet skiing and fishing, and for viewing special aquatic events such as speedboat races. There are several swimming beaches around the island with fire rings (619) 276-8200.
Economic Ranking: E

06-245 **East Shore.**
Facilities include Mission Bay Visitor Center, landscaped picnic areas, paved paths, playgrounds, physical fitness course, and basketball courts; swimming and fishing at sandy beaches, which include Playa Pacifica and Tecolote Shores (619) 276-8200.
Economic Ranking: E

06-246 **De Anza Cove.**
Sandy beach and swimming area with large picnic areas, volleyball courts, playground, paved path, four-lane concrete boat ramp, and dock. The cove is used by swimmers and water-skiers (619) 276-8200.
Economic Ranking: E

06-247 **Robb Field and Playground.**
A large park and athletic field at the mouth of the San Diego River with picnic areas and facilities for baseball, tennis, and basketball (619) 531-1563.
Economic Ranking: E

06-248 **Ocean Beach Park.**
Sandy beach with tidepools, a small grassy picnic area, and a paved promenade. The beach is noted for excellent surfing, but swimming and surf fishing are also popular (619) 221-8901.
Economic Ranking: E

06-249 **Ocean Beach Municipal Fishing Pier.**
2,100 foot-long t-shaped pier, located at the south end of Ocean Beach Park, is the longest pier on the west coast (619) 221-8901.
Economic Ranking: E

06-250 **Ocean Beach City Beach.**
A series of small pocket beaches and tidepools along the coast from the Ocean Beach Pier south to the end of Pescadero Avenue; sunbathing and surfing.
Economic Ranking: E

06-251 **Sunset Cliffs Park.**
Several steep trails lead from the parking lot down the cliff face to pocket beaches frequently used by experienced divers and surfers.
Economic Ranking: E

06-252 **Shelter Island.**
Beach area of the island is popular for swimming, fishing, water-skiing, and picnicking. A pedestrian/bicycle path runs the length of the island. Other facilities include: picnic areas, public moorings, hoists, fishing pier, and a 24-hr. boat launch with ten concrete lanes.
Economic Ranking: E

06-253 **La Playa.**
Narrow, sandy beach located on the Point Loma Peninsula just west of Shelter Island.
Economic Ranking: E

06-254 **Cabrillo National Monument.**
Commemorates Cabrillo's discovery of San Diego Bay. The monument features a visitor center with exhibits, interpretive programs, and a gift shop. Hiking trails overlooking the ocean and the bay lead to some of the finest tidepools in Southern California (619) 557-5450.
Economic Ranking: E

06-255 **Spanish Landing Park.**
Sandy beach located just south of the San Diego International Airport. Popular swimming spot with a grassy picnic area near the shore.
Economic Ranking: E

06-256 **Harbor Island.**
Serves primarily as a boating center. Other facilities include hotels, restaurants, shops, and boating services. A path with benches runs the length of the island.
Economic Ranking: E

06-257 **Embarcadero.**
Paved pedestrian bicycle path with benches that runs along the waterfront on the east side of the bay. The Embarcadero also features restaurants, fish markets, and shops.
Economic Ranking: E

06-258 **Maritime Museum.**
Three historic ships moored along the Embarcadero at the end of Ash Street (619) 234-9153.
Economic Ranking: E

06-259 **Embarcadero Marina Park.**
Divided in two sections, but is connected by walkway along the seawall on the bay. Facilities include picnic areas, paved path, basketball courts, and par course.
Economic Ranking: E

06-260 **Bay View Park.**
Small, landscaped park with beaches and paved viewpoint.
Economic Ranking: E

06-261 **Harbor View Park.**
Small, grassy park with benches.
Economic Ranking: E

06-262 **Centennial Park.**
Bayfront park with lawns, benches, paved paths, and a small sandy beach. Fishing pier at landing for pedestrian/bike ferry to San Diego.
Economic Ranking: E

06-263 **Coronado Tidelands Regional Park.**
Large park with baseball diamond, play fields, par course, pedestrian and bike paths, lawns, benches, picnic tables, and a small, sandy beach used for swimming.
Economic Ranking: E

06-264 **Glorietta Bay Park**
Playground, grassy picnic area, small sandy beach, and boat launch (619) 522-7342.
Economic Ranking: E

06-265 **Coronado Shores Beach.**
Wide, sandy beach heavily used for surfing, swimming, and surf fishing.
Economic Ranking: E

06-266 **L.M. " Pop " Pepper Park.**
Public ramp operated by the Port of San Diego. Facilities include a ten-lane concrete boat ramp, a small dock, trailer space, a picnic area with barbecue grills, and a fishing platform (619) 686-6200.
Economic Ranking: E

06-267 **Chula Vista Launching Ramp.**
Concrete boat launch with ten lanes. Facilities include docks, a hoist, picnic areas with barbecue grills, and a playground. Noted for swimming, fishing, and water-skiing (619) 686-6200.
Economic Ranking: E

06-268 **Cays Park.**
Three segments offer tennis courts, volleyball, baseball diamond, and a multi-purpose field.
Economic Ranking: E

06-269 **Silver Strand State Beach.**
Sandy beach noted for swimming, surfing, clamming, surf fishing, and catching grunion. Also provides picnic areas and firepits (619) 435-5184.
Economic Ranking: E

06-270 **Imperial Beach.**
Wide, sandy beach popular for swimming, body surfing, and surf fishing. The Imperial Beach Municipal Pier has a landscaped plaza and a cafe (619) 423-8322.
Economic Ranking: E

06-271 **Border Field State Park.**
Located on U.S. Border with Mexico, park features 2-mile stretch of sandy beach used for swimming, clamming, and surf fishing. Provides picnic areas, and hiking and equestrian trails (619) 435-5184.
Economic Ranking: E

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